

International study programs



université
de **BORDEAUX**



Study with us!

France is one of the most popular destinations for international students. It's no wonder with a top-quality, yet accessible, higher education system. And once you're here, what better place to live and learn other than Bordeaux?!

The University of Bordeaux is a multidisciplinary institution with a college of Law, Political Science, Economics, Management, a college of Health Sciences, a college of Human Sciences and a college of Science and Technology. It also includes an Institute of Technology, an Institute of Education and an Institute of Vine and Wine Science.

Around 60 international study programs are on offer at every level (Bachelor, Master, PhD), proposing mobility, teaching in English (or another foreign language) and / or a double degree. We offer over 25 Master programs taught 100% in English.

Read on to discover these study programs...

Our Masters

Economics & Management

Master: European Business Administration

Master: International Business Management

Master (MBA): Business Administration

Master: Economic Affairs

Science and Technology

Collaborative degree: Aero-System Operations

Master: Image Processing and Computer Vision

Master: Science in Marine Environment and Resources

Master: Functionalized Advanced Materials and Engineering

Master: Physical- Chemistry and Chemical Physics

Master: Advanced Materials

Master: Advanced Materials Innovative Recycling

Master: Advanced Materials for Innovation and Sustainability

Master: Light Sciences and Technology

Master: Enterprise Engineering

Master: Transfers-Fluids-Materials in Aeronautical and Space Applications

Master: Algebra, Geometry and Number Theory

Master: Agro-Biomedical Science

Master: Biology Agrosociences

Master: Bioinformatics and Omics

Master: Neuroscience (NeuroBIM)

Master: Neuroscience (Neurasmus)

Master: Euro-Mediterranean Master of Neuroscience (EMN-Online)

Master: Cancer Biology

Master: Environmental Contamination and Toxicology

PhD: Light Sciences and Technologies

PhD: Algebra, Geometry and Number Theory

PhD: Functional Materials for Energy, Information Technology and Health

PhD: Bordeaux Neurocampus

Health Sciences

Master: Pharmacovigilance and Pharmacoepidemiology

Master: Analytical Chemistry for Drugs and Natural Products

Master: Public Health Data Science

PhD: Digital Public Health

Wine Sciences

Master: Wine Tourism Innovation

*Economics and
Management*



MASTER European Business Administration

Program factsheet

ADMISSION REQUIREMENTS

Applicants must fulfill the following requirements:

- › Have completed, with honors, a Bachelor 3 year (180 ECTS equivalent) or 4 year degree (240 ECTS equivalent) in any study field.

LEVEL

First year (Master 1) of the Business Administration program.

PROGRAM DURATION

1 year (60 ECTS).

TUITION FEES

Total cost of 4,240€.

LANGUAGE REQUIREMENTS

The language test in English is not mandatory if you are a native English speaker or if you have already studied in English.

- › TOEFL IBT 90
- › IELTS 6.5 no sub-score under 6
- › Cambridge: Certificate in advanced English
- › TOEIC "listening and reading": 890/990, "speaking and writing": 300/400
- › PTE Academic 65.

Strengths

Access to the "MyFinanceLab" online platform. This platform guides students with our main book "Corporate Finance", providing fully integrated homework, tests and tutorial system.



Internationally recognized teaching team.



Strong class diversity with students from different academic backgrounds.



Supportive learning environment with a rigorous curriculum covering the basics of management.



Excellent resources and state-of-the-art facilities.

Program outline

The Master 1 (M1) European Business Administration (EBA) is composed of introductory management and law courses taught entirely in English by European and international professors as well as faculty staff.

The aim of this Master 1 is to provide students from different academic backgrounds with the basic principles of management.

College of Law, Political Science,
Economics & Management

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Program structure

Semester 1

- › Organizational behavior I
- › Organizational strategy
- › Economic globalization
- › European economic environment
- › European institutions
- › European law I
- › International accounting I
- › Financial mathematics
- › Decision-making and statistical analysis
- › French as a foreign language

Semester 2

- › Marketing
- › Human resources
- › International strategy
- › Corporate finance
- › Banking and finance in Europe
- › European law II
- › International accounting II
- › Business French
- › Internship / dissertation

How to apply?

Complete the online application form for the EBA program via the following link:

<http://iaebordeaux.com/Our-programs/Master-1-in-European-Business-Administration>

Once the online application form completed, send the following documents to the International Office at the following email address:

iae.applications@u-bordeaux.fr

- › Official transcripts
- › Copies of all previous diplomas
- › Passport copy (or ID card if European)
- › Cover letter and CV (in English)
- › Certificate of English language level
- › Passport photo

→ And after?

- › By completing this first year (M1), students gain the necessary skills and groundwork to directly enter the one-year Master in Business Administration (M2 MBA) as well as other Master 2 programs in management.
- › The program also trains and prepares students for executive positions in companies.

Please note:

- › Maximum number of students per class: 25
- › The selection procedure is based on student motivation and interviews.
- › Good previous academic results and strong social skills are the most important selection criteria for the program.

Contacts

Program director: Pedro Arbulu

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Program coordinator: Juliana Faye

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TOMORROW'S SUCCESS
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MASTER International Business Management

Program factsheet

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Have completed, with honors, a Bachelor degree (4 year program), or a 4 year/240 ECTS equivalent course. In addition, one or two years of professional experience within an international environment is welcome.
- › For the study field, degrees in Business Administration, Management, Economics and Law are favored, however all specialties are accepted.

LANGUAGE REQUIREMENTS

The language test in English is not mandatory if you are a native English speaker or if you have already studied in English.

- › TOEFL IBT 90
- › IELTS 6.5 no sub-score under 6
- › Cambridge: Certificate in advanced English
- › TOEIC "listening and reading": 890/990, "speaking and writing": 300/400
- › PTE Academic 65.

LEVEL

Second year (Master 2) degree.

TUITION FEES

Total cost of 5,240€.

PROGRAM DURATION

1 year (60 ECTS).

Program outline

The Master's degree in International Business Management is dedicated to the general field of international business management with a specialization in geopolitics and cross cultural management. This generalist program has a strong analysis-oriented focus, aimed at understanding the global business environment.

An extensive first semester curriculum, based on theoretical learning, provides a clear understanding of the real challenges facing managers and organizations operating in a global context. The second semester focuses on practical experience with a 6-month internship, to be carried out in France preferably.

Strengths

The International Business Management program prepares students for executive positions in international companies or in subsidiaries that specialize in international markets. A generalist program, all company functions are covered during the cursus and students learn about the various different operational stages involved when a company goes global.

In addition to the fundamental knowledge and skills essential for international managers today, students also have the opportunity to specialize in their sector of interest and to apply the theory learned in the real working world.

The International Business Management program also represents a great opportunity to live a multicultural experience in and outside the classroom, thus revealing the reality of working in a multicultural and multilingual environment. An average of 15 nationalities are represented per cohort and students are able to discuss current, global issues with people from different backgrounds, and as a result, gain a truly international outlook.

College of Law, Political Science,
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Program structure

Various teaching and assessment methods are used. During seminars, a variety of teaching/learning methods are used: course-work based assessment such as exercises, case studies and group projects, oral presentations (both written and oral) as well as tests and a final report on the internship completed in the second semester.

Some classes mix international students with French students from the French version of the International Business Management program.

Semester 1

- › French as a foreign language
- › International business law
- › International trade practices
- › Logistics and supply chain management (including a commented visit to the Grand Maritime Port of Bordeaux)
- › International strategic management
- › Information system, intelligence and security policies
- › Cross-cultural management (anthropological approach), along with fundamentals in anthropology and sociology and the management of multicultural teams
- › Geopolitics (with a focus on emerging countries and risks)
- › International economics
- › International marketing, digital marketing
- › International accounting and finance
- › Global human resources management

Semester 2

- › Serious game
- › International and intercultural communication
- › Innovation
- › Doing business in France (including visits to French companies)
- › Wine business economics (including visits to wineries, cooperage craftsman, etc.)
- › Internship (followed by an academic dissertation as well as an oral defense)

How to apply?

Complete the online application form for the IBM program via the following link: <http://iaebordeaux.com/Our-programs/Master-2-in-International-Business-Management>

Once the online application form completed, send the following documents to the International Office at the following email address: iae.applications@u-bordeaux.fr

- › Official transcripts
- › Copies of all previous diplomas
- › Passport copy (or ID card if European)
- › Cover letter and CV (in English)
- › Certificate of English language level
- › Passport photo

→ And after?

- › The International Business Management program develops not only new skills but also new ways of thinking. Providing advanced training in business and management, the Master degree represents a true asset to students wishing to launch an international career.

Please note:

- › Maximum number of students per class: 25
- › The selection procedure is based on student motivation and interviews.
- › Good previous academic results and strong social skills are the most important selection criteria for the program.

Contact

Program director: Emmanuelle Sauvage
› emmanuelle.sauvage@u-bordeaux.fr / +33(0)5 56 00 45 24

Program coordinator: Juliana Faye
› juliana.faye@u-bordeaux.fr / + 33 (0)5 56 00 45 23



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MASTER Business Administration (MBA)

Program factsheet

ADMISSION REQUIREMENTS

Applicants must fulfill the following requirements:

- › Have completed, with honors, a Bachelor degree or 4 year (240 ECTS equivalent) course in the field of business.

OR

- › Have consequent work experience in the field of business.

LEVEL

Second year (Master 2) of the Business Administration program.

PROGRAM DURATION

1 year (60 ECTS).

TUITION FEES

Total cost of 5,240€.

LANGUAGE REQUIREMENTS

The language test in English is not mandatory if you are a native English speaker or if you have already studied in English.

- › TOEFL IBT 90
- › IELTS 6.5 no sub-score under 6
- › Cambridge: Certificate in advanced English
- › TOEIC "listening and reading": 890/990, "speaking and writing": 300/400
- › PTE Academic 65.

Strengths

Access to the "MyFinanceLab" online platform. This platform guides students with our main book "Corporate Finance", providing fully integrated homework, tests and tutorial system.



A core curriculum that provides students with in-depth knowledge of the academic disciplines as well as experience within the day to day operations of business leaders.



Guaranteed return on investment in education.

Program outline

The aim of the MBA is to develop an advanced level of knowledge within the domains of business and management with a focus on Corporate Finance and Accounting.

The program is taught entirely in English by European and international professors and professionals as well as faculty staff.

The MBA program is committed to the education and development of business leaders who will have the knowledge and skills to create value for their stakeholders and society. It develops ideas and a mindset that encourage global transformation from a business perspective.

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Program structure

Semester 1

- › European economic environment II
- › Business law
- › Organizational behavior II
- › Financial statements analysis
- › Financial accounting
- › International marketing
- › Financial markets
- › French as a foreign language
- › Decision-making and corporate finance

Semester 2

- › Cost accounting and management control
- › Investment and portfolio management
- › Risk management
- › Business and strategic policy
- › Information and project systems
- › Business game
- › Operations and logistics management
- › Internship

How to apply?

Complete the online application form for the MBA program via the following link:
<http://iae.u-bordeaux.fr/Our-programs/Master-2-in-Business-Administration>

Once the online application form completed, send the following documents to the International Office at the following email address:

iae.applications@u-bordeaux.fr

- › Official transcripts
- › Copies of all previous diplomas
- › Passport copy (or ID card if European)
- › Cover letter and CV (in English)
- › Certificate of English language level
- › Passport photo

→ And after?

- › The program prepares students for high-level executive positions in company headquarters or subsidiaries.

Please note:

- › Maximum number of students per class: 25
- › The selection procedure is based on student motivation and interviews.
- › Good previous academic results and strong social skills are the most important selection criteria for the program.

Contacts

Program director: Pedro Arbulu

- › iae.applications@u-bordeaux.fr / +33 (0)5 56 00 97 19

Program coordinator: Juliana Faye

- › juliana.faye@u-bordeaux.fr / + 33 (0)5 56 00 45 23

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MASTER Economic Affairs

Program factsheet

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold an accredited Bachelor's degree (or equivalent) in economics, management, law or the humanities fields, with a record showing high academic achievement.
- › Demonstrate a clear commitment to international affairs.
- › French students: M1 in economics, management, law, social sciences or humanities.

LANGUAGE REQUIREMENTS

An advanced level of English is essential and must be demonstrated by an official test result:

- › TOEFL IBT 90, IELTS 6.5 no sub-score under 6.
- › Cambridge: Certificate in advanced English.
- › TOEIC "listening and reading": 890/990, "speaking and writing": 300/400, PTE Academic 65.

LEVEL

Master degree.

PROGRAM DURATION

1 year (60 ECTS).

Program outline

The Master in Economic Affairs (MEA) is one of the 18 postgraduate master programs offered by the College of Law, Political Science, Economics and Management of the University of Bordeaux. It is a full-time degree taught in English, designed for international and French university graduates.

The program provides students with an opportunity to develop a broad understanding of key economic issues in international affairs and an in-depth knowledge of practical European and international business skills and practices.

What distinguishes the program is its focus on specific European and international trade and financial policies and business transactions using analytical tools from economics, political science, management, business and law.

The program provides companies with managers ready to deal with intercultural management and international trade situations.

The Master in Economic Affairs is ideal for students who wish to deepen their theoretical and practical knowledge of international affairs, who aspire to a career in the international arena and who want to add an international dimension to their educational background. It is also an ideal program for those who wish to take part in a multicultural experience in a culturally rich and dynamic environment and who desire to strengthen their proficiency in English as well as acquiring basic language skills in French.

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Program structure

September to November:

International students are advised to register for a three-month intensive DU (University Diploma) program, specifically designed for the MEA foreign students whose mother tongue is not French and/or who did not graduate in economics. The DU program offers intensive elementary-to-advanced level language courses in French, intermediate-to-advanced level language courses in English, remedial courses in international and European economics, some business trips and access to cultural and intercultural activities and events.

December to June:

Courses for the MEA start in December.

Semester 1

(30 ECTS - 180 hours)

- › International contract law
- › European markets dynamics and specificities
- › European fiscal optimisation
- › European populations
- › Exchange rates risk
- › International payments
- › Trading and shipping
- › Business knowledge
- › Leadership
- › Macroeconomic issues

Semester 2

(30 ECTS - 180 hours)

- › Communication methodology
- › Business development project
- › E-Economy
- › Innovation
- › International financial reporting
- › Intellectual property rights
- › Intelligence économique (course in French)
- › Luxury economy

Strengths



The goal of the program is to develop a range of marketable skills and competences needed to carry out functions in international trade (exchange rates risk management, international payments, trading and shipping, economic intelligence) and intercultural businesses (market dynamics and specificity, leadership).



The program combines courses in both theory and practice, and focuses on working methods, readings, team-work and management projects.

Contacts

Program Directors:

Cécile Cormier, Associate Professor in American Studies
cecile.cormier@u-bordeaux.fr

Bertrand Blancheton, Dean of the Faculty of Economics
bertrand.blancheton@u-bordeaux.fr

For more information about the registration process:

Frédéric Guyot
frederic.guyot@u-bordeaux / +00 33 (0)5 56 84 54 78
or visit: economie.u-bordeaux.fr/Formations

→ And after?

The program prepares students for a broad range of careers in the international business and trade areas:

- › Export manager
- › Transnational contracts negotiator
- › Trade manager
- › Customer service manager
- › Area manager

How to apply?

If you want to apply, you must submit the following:

- › Updated version of your resume
- › Cover letter
- › At least two letters of reference from current or former university professors and/or employers
- › Copies of your most advanced diplomas or your course transcripts
- › Your score on an official English proficiency test (if English is not your mother tongue).

These documents may be emailed to program director, Cécile Cormier (cecile.cormier@u-bordeaux.fr).

The deadline for the administrative registration is April 2019. However, depending on your country of residence, the registration deadline through Campus France might be earlier.

For this reason, we advise you to send the required documents for academic approval as soon as possible - class size is limited and enrollment is very selective.

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*Science and
Technology*



Collaborative Degree Aero-System Operations (AESOP)

Program factsheet

ACADEMIC COOPERATION

Consortium of two universities:

- › **USA:** University of Cincinnati (Ohio).
- › **FRANCE:** University of Bordeaux: College of Science and Technology.

ADMISSION REQUIREMENTS

University of Bordeaux:

- › Hold a European Bachelor degree or a European Professional Bachelor diploma with 180 ECTS/90 US credits within a College of Science. This training must be accompanied by three years professional experience; or
- › Hold a Master degree with at least 240 ECTS/120 US credits within a College of Science.

University of Cincinnati:

- › Hold a US Bachelor degree with 240 ECTS/120 US credits within a College of Science.

LEVEL

Collaborative Degree Program.

PROGRAM DURATION

1 year (60 ECTS - 30 US credits).

LANGUAGE REQUIREMENTS

Students for whom English is not the mother language require a minimum level of: IELTS (6,5 mini), Pearson (59, TOEFL (85), European Level (B2), TOEIC (750).

TUITION FEES

- › Annual tuition fees: 24,000 USD
- Significant reductions exist upon application, depending on the university/country of origin:
- › Students from partner universities: 11,000 USD
 - › Students from other international universities: 15,000 USD

Program outline

With global competition and the consumer demand for innovation becoming ever-more imperative, the need for collaborative engineering is prevalent throughout today's market. The realm of air traffic management and safety –both civilian and defense– is no different.

The University of Bordeaux/IMA and the University of Cincinnati College of Engineering and Applied Science (UC CEAS) have partnered to develop the Aero-System Operations (AESOP) Collaborative Degree Program.

Students at each university pursue UC CEAS' Master of Engineering Degree and UBx's International Diploma concurrently and graduate with **both degrees**. This program offers a practice-oriented, individualized degree that prepares engineers to excel in today's working world.

Strengths

Engineering fields, as a whole, have experienced explosive growth over the past decade, especially that of Aeronautical, Mechanical, Electrical, Electronic and Computer Engineering as well as Computer Science.

In today's competitive technology environment, top opportunities are going to skilled engineers who have broad professional capabilities. The AESOP curriculum provides advanced training to those interested in expanding their knowledge and expertise. Advantages of the graduate degree include:



- › Maintain licensure requirements with graduate courses



- › Gain a unique international graduate study experience



- › Expand your knowledge and marketability



- › Broaden your understanding of engineering through an interdisciplinary focus



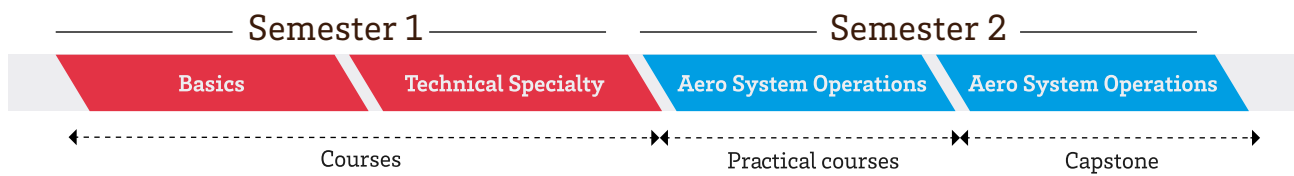
- › Increase your earning potential



- › Follow some courses online

Program structure

Collaborative Degree **Aero-System Operations**



Fall semester: Cincinnati

Basics (18 credits)

AESOP Program Requirement (6 credits, mandatory)

- › Introduction to Aircraft Systems
- › Regulations and Maintenance

Project / Task Management Development (6 credits, choose one)

- › Engineering Economic Analysis
- › Quality Control
- › Project Management
- › Entrepreneurship and Technology Law

Interpersonal Skill Development (6 credits, choose one)

- › Management of Professionals
- › Leadership
- › Effectiveness in Technical Organizations

Technical Specialty (12 credits, choose two courses)

- › Aeronautical Engineering
- › Mechanical Engineering
- › Electrical, Electronic and Computer Engineering
- › Computer Science

→ And after?

Studies:

- › The AESOP program provides a complete panel of individual training modules about Aerospace Operations, Aircraft Maintenance and Aircraft Life Management Cycle. After graduating, these modules may be followed individually, thus bringing complementary qualifications.

Employment market:

- › After obtaining the international AESOP Collaborative Degree, graduates will be equipped to quickly and efficiently take on an operational position within the aircraft industry.

Spring semester: Bordeaux

Aero-System Operations (22 credits)

Airworthiness UBx/ENAC and Maintenance Program Planning (6 ECTS, mandatory)

Each module includes theory, applications and lab (4 ECTS, choose one):

- › Maintenance Repair & Overhaul
- › Continuous Airworthiness Maintenance Organization

Each module includes theory, applications and lab (12 ECTS, choose one):

- › Avionics Maintenance
- › Structural Aircraft Maintenance
- › Propulsion Aircraft Maintenance

Aero-System Operations (8 credits)

Capstone project: project or internship with choice of sponsored research at UBx laboratory or internship at industry level.

How to apply?

UBx students:

- › <http://www.u-bordeaux.com/Education/International-study-offer/Programs/Science-and-Technology>

UC students:

- › <http://www.uc.edu/admit.html>

Contact

PROGRAM COORDINATOR:

UBx / IMA, Mérignac

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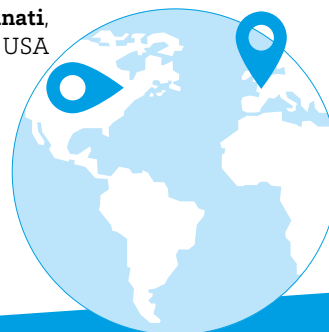
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MASTER Image Processing and Computer Vision (IPCV)

Program factsheet



ACADEMIC COOPERATION

Consortium of 3 universities:

- › Pazmany Peter Catholic University, Budapest, Hungary (PPCU)
- › Universidad Autónoma de Madrid, Spain (UAM)
- › University of Bordeaux, France (UBx).

LEVEL

Triple Master degree, completed by three diploma supplements.

Students who successfully complete the International Image Processing and Computer Vision (IPCV) Master Program, including the compulsory mobility period, receive a national degree from each partner university:

Pazmany Peter Catholic University:

- › MSc degree in Engineering Information Technology; specialization in IPCV.

Universidad Autónoma de Madrid:

- › Master's degree in ICT Research and Innovation (i2-ICT).

University of Bordeaux:

- › Master degree in "Informatique", (Computer Science); specialization in IPCV.

A diploma certification is additionally awarded by each university.

TUITION FEES

- › Self-funded program country students: 4,500 € per year (9,000€ for 2 year-program).
- › Self-funded partner country students: 9,000€ per year (18,000€ for 2 year-program).

PROGRAM DURATION

2 years (120 ECTS).

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor degree or equivalent in engineering science, mathematics, computer science or signal processing before the start of the program.
- › Average grade of at least "Good" according to local criteria for the courses completed before the mobility period.
- › Adequate knowledge of written and spoken English, equivalent to B2 according to the CEFR B2 or IELTS score of 6.5 or TOEFL of 90. Native English speakers do not have to submit English test results.

LANGUAGE REQUIREMENTS

English: equivalent to B2 according to the CEFR.

Program outline

The International Master Program in Image Processing and Computer Vision (IPCV program), managed by the University of Bordeaux, provides specialized training in a field of increasing importance in our daily lives. It is essential in domains such as medicine, surveillance, industrial control, remote sensing, e-commerce and automation.

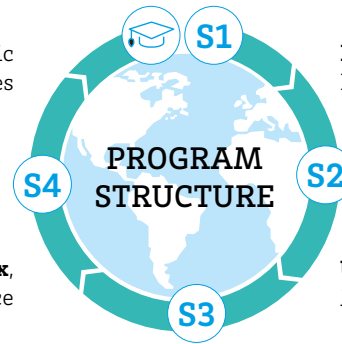
The IPCV Master Program covers a wide range of methods in computer vision and guarantees highly-qualified graduates in this field.

Three partner universities, with internationally recognized experience in these domains, have pooled their complementary expertise and developed this international postgraduate cooperation initiative.

The IPCV program is an Erasmus Mundus Joint Master Degree developed under the Key Action 1 of the Erasmus+ program.

All students follow a common mobility scheme and course curriculum.

Internship in academic laboratory or industries



PPCU,
Budapest, Hungary

UBx,
Bordeaux, France

UAM,
Madrid, Spain

All students follow the same mobility schemes and the same curriculum. Each semester is awarded 30 ECTS. Students may choose two specialization tracks:

- › **Track 1:** Vision and applications
- › **Track 2:** Vision and devices

Semester 1

Pazmany Peter Catholic University:

- › Fundamental and theoretical knowledge in mathematics, electronic computing, signal and image processing, sensors and parallel computing.

Semester 4

- › The last semester is dedicated to an internship at a company or research laboratory anywhere in the world.

Semester 2

Universidad Autónoma de Madrid:

- › Video analysis, medical image processing and analysis, biometrics, computer vision for surveillance problems and initiation to research.

Semester 3

University of Bordeaux:

- › Object-programming, deep learning, image reconstruction, variational modeling, project-management.

→ For more details

Please consult the website:

- › www.ipcv.eu/programme/courses

Strengths



International program taught by experts from three different universities in Europe.



Triple Master degree.



International mobility period in three countries.

→ And after?

After graduation, students have access to career opportunities such as engineers or further research as doctoral students. Their educational background makes them attractive candidates for companies in the following areas:

- › E-commerce
- › Medical imaging
- › Personal assistance
- › Automation
- › Industrial control
- › Security
- › Post-production
- › Remote sensing
- › Software publishing

How to apply?

Please send **Curriculum Vitæ, grades, cover and recommendation letters** to:

- › application-ipc@u-bordeaux.fr

Please note: the next academic year starts in August 2020 and the deadline for applications is the 31st January 2020.

Contact

- › ipc@u-bordeaux.fr
- › <http://ipc.eu/>



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TOMORROW'S SUCCESS STARTS TODAY

MASTER Science in Marine Environment (MER+)

Program factsheet

ACADEMIC COOPERATION

Consortium of 4 universities:

- › University of the Basque Country, Spain (coordinator institution)
- › University of Southampton, U.K.
- › University of Bordeaux, France
- › Université de Liège, Belgium

LEVEL

Multiple Master of Science degree in "Marine Environment" awarded by the three consortium universities where the student has studied.

ADMISSION REQUIREMENTS

Candidates must have:

- › A Bachelor degree or equivalent from a European or third country university in the field of biosciences, chemical sciences, geosciences, physical sciences or engineering.

LANGUAGE REQUIREMENTS

The teaching language is 100% English. Proof of proficiency in English is essential.

- › The minimum requirements for non-native speakers are an IELTS score of 6.5 or TOEFL 570/227, or an equivalent approved by the Joint Program Board of the Consortium (JPB).

PROGRAM DURATION

2 years (120 ECTS).

TUITION FEES

Annual fees:

- Irrespective of the chosen study track:
- › Third country students*: 9,000€/year
 - › European students / assimilated as European*: 4,500€/year
- *according to Erasmus Mundus rules*

Scholarships:

- Irrespective of the chosen study track:
- › Erasmus Mundus scholarships
 - › Erasmus mobility grants
 - › Mobility grants funded by the Spanish Government and the Basque Government

Students choosing to study in Bordeaux:

- › Mobility grants available according to excellence criteria funded by the Initiatives of Excellence in Bordeaux and Bilbao (i.e. the Excellence programs of the Universities of the Basque Country and of Bordeaux: Euskampus, IdEx - International Master, www.aquimob.fr).
- › Mobility grants available according to excellence / social criteria funded by the partner institutions and by regional governments (e.g. Conseil Régional Aquitaine for Bordeaux: www.aquimob.fr).



Co-funded by the
Erasmus+ Programme
of the European Union

Program outline

The MER+ Master program provides high quality teaching in general oceanography with a specialization in Marine Environment (ecology, ecotoxicology, biochemistry, geochemistry, sedimentology, paleo-oceanography) and living or non-living marine resources.

The MER+ program benefits from a consortium of four EU universities (Bilbao - Spain, Bordeaux-France, Southampton-UK and Liège-Belgium) and a worldwide network of associated partners.

The MER+ Master program is organized according to three teaching semesters (Semester 1-3: coursework) plus a research master thesis (Semester 4) carried out via an internship at any partner research institution worldwide. Mobility is mandatory and three different mobility opportunities are proposed for the coursework:

- › Bordeaux / Bilbao / Southampton.
- › Bordeaux / Bilbao / Liège.
- › Southampton / Bilbao / Liège.



Coursework is organized according to seven mandatory and optional modules (total: 90 ECTS):

- › **Module 1**
Fundamental: Ocean Science
- › **Module 2**
Framework: Ocean Physical Environment
- › **Module 3**
Ocean Biological Environment
- › **Module 4**
Anthropogenic Impact on Marine Ecosystems
- › **Module 5**
Ocean Observatories and Environmental Monitoring Systems
- › **Module 6**
Valorization of the Marine Environment
- › **Module 7**
Marine Environmental Careers

The MSc thesis research is carried out during Semester 4 (30 ECTS) at any Marine Research Institute worldwide.

Strengths



Successful MER+ students acquire a high degree of personal and scientific maturity, due to the wide range of topics taught in the domains of oceanography and marine resource management.



At least three major European academic systems are experienced, and practice in applications for funding etc. at an international level is largely acquired.



Students learn to prove strong mobility, autonomy and the capacity to adapt to different cultural and administrative conditions in the different countries involved.



Having studied in (at least 3) different countries and followed all the lectures and practical workshops in the English language, MER+ students have excellent profiles for starting positions in a scientific career in an international context.

→ And after?

Successful completion of this program will prepare students for a leadership role in various marine sectors such as conservation and environmental management, fisheries, non-governmental organizations and all levels of government positions from local to global. Students benefit from a worldwide network of partner institutions.

From its beginning (2007), the MER program has trained more than 100 students. More than 50% of graduates continue with a PhD. Other graduates integrate public or private organizations in their field of expertise.

How to apply?

Online application:
<http://merplus.merconsortium.eu>

Deadlines:

- › Application for Erasmus Mundus scholarship: mid-March
- › For European self-funded students: mid-May

Contact

MER+ program and application procedure:

- › Master Secretariat at the coordinating University:
<http://merplus.merconsortium.eu>

Track involving Bordeaux:

- › Prof Jörg Schäfer: jorg.schafer@u-bordeaux.fr
- › Florina Camarasu: florina.camarasu@u-bordeaux.fr

www.merconsortium.eu

www.u-bordeaux.com

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TOMORROW'S SUCCESS
STARTS **TODAY**

MASTER Functionalized Advanced Materials and Engineering (FAME+)

Program factsheet

ACADEMIC COOPERATION

Consortium of 7 universities:

- › **Belgium:** Université de Liège, Université Catholique de Louvain
 - › **France:** Institut National Polytechnique de Grenoble (coordinator), University of Bordeaux
 - › **Germany:** Technische Universität Darmstadt, Universität Augsburg
 - › **Portugal:** Universidade de Aveiro
- › **Associated partners:**
- › **Industry:** Schneider Electric Industries SAS; SOLVAY; Robert BOSCH GmbH; MERCK, etc.
 - › **Research & Technology Organizations:** EMMI; CEA; Fraunhofer, etc.
 - › **Worldwide Associated Universities:** University of Waterloo (Canada); Okayama University (Japan); Virginia Tech University (USA); University of Sao Paulo (Brazil); VNU Hanoi University of Science (Vietnam), etc.

LEVEL

Double Master degree in "Material Science" awarded by the two consortium universities where the student has studied.

Program outline

The FAME+ Master is a two-year Master of Science Program in Advanced Functional Materials. It is taught in English (100%) at seven universities, leaders in the field.

This program provides high-level academic and research-oriented education on the synthesis, characterization and processing of all classes of materials with emphasis on "Advanced Hybrid Materials and Ceramics by Design" in Bordeaux.

The program helps students develop a creative thinking mindset and leadership skills, along with a keen awareness of social and industrial needs, thanks to innovative learning practices that include extensive, collaborative projects.

College of Science and Technology

PROGRAM DURATION

2 years (120 ECTS).

LANGUAGE REQUIREMENTS

All courses are taught in English. Applicants must attach an official language test report to their application.

- › IELTS (Academic IELTS only): overall Band Score: 6 / writing Band Score: 5
- › TOEFL, total score: 92 (IBT), 550 (PBT) / writing score: 22 (IBT), 4.0 (PBT)
- › Cambridge Certificate of Advanced English / Cambridge Certificate of Proficiency in English: Grades accepted: A, B, C

These minimum requirements are very strict. If the applicant score does not fulfill the minimum requirements, he/she is not eligible to apply and the application cannot be processed.

ADMISSION REQUIREMENTS

Candidates must have: Bachelor degree in material science or in physics / physical chemistry / chemistry / engineering with a speciality in the field of materials.

TUITION FEES

Annual fees:

- › Erasmus Mundus scholarship holders and self-funded students:
- › 9,000€/yr for third-country students,
- › 4,000€/yr for European students.

FAME+ tuition fees are covered by the Erasmus Mundus grant. Self-funded students should apply for other grant schemes (see below).

Students from partner universities benefit from a fee-waiver and pay only local tuition fees defined by their home university.

Grants:

- › Erasmus Mundus scholarships
- › Mobility grants from partners
- › Mobility grants from applicant countries (e.g. CONACYT in Mexico)
- › Mobility grants from bilateral agreements (e.g. Indian-French Raman-Charpak Fellowships)

Bordeaux / Darmstadt track:

- › Bordeaux mobility grants
- › International Master IdEx grants (Bordeaux students following M1 in Darmstadt / international students following Bordeaux / Darmstadt track)
- › Eiffel grants (international students already enrolled in Darmstadt for M1, covering 2nd yr in Bordeaux)
- › DAAD grants (Bordeaux students covering 1st yr in Darmstadt)
- › Aquimob grants (www.aquimob.fr)

European mobility is mandatory during the two-year Master program thus taking advantage of the complementary skills of the universities in the network.

In the last decade, more than 200 students have graduated from the FAME+ Master.

université
de **BORDEAUX**



Co-funded by the
Erasmus+ Programme
of the European Union

Program structure

The FAME+ program consists of four semesters (30 ECTS each) including a Master thesis in a European research laboratory.

- › The first two semesters establish a firm background in Chemistry and Physics of Materials. Professional skills are developed through the FAME+/e project.
- › The third semester is dedicated to a specialization provided by one of the partner universities as world-leading expert. It is composed of mandatory and optional courses. For students studying in Bordeaux, the specialization is "Advanced Hybrid Materials and Ceramics by Design".
- › The last semester is dedicated to the Master thesis, prepared in the academic or industrial research laboratories of the FAME+ network.

Feedback

The EQAB considers FAME+ an excellent initiative for [students] who are interested in interdisciplinary materials science and engineering[...].

EQAB [is] convinced that the FAME+ program is well structured and organized. The FAME+ student community is rather international and has developed perceptible group dynamics, noticeably promoted by the annual FAME+ summer schools [...].

The EQAB was impressed by the wide variety of interdisciplinary research subjects presented at the workshop[s]. It considered some of the presented work excellent or even outstanding, and often at the frontier of the science and technology of functional materials and devices. The EQAB takes this as label of high quality and merit of the program.

Excerpts from External Quality Assessment Board (EQAB) report

→ And after?

After completion of this Master, students are encouraged to apply for PhD programs in Europe.

Graduates may also start working as scientists or R&D engineers within the industrial sector.

More than 70% of the FAME Master graduates from Bordeaux have successfully pursued their studies with a PhD opportunity. These PhDs have been carried out in Bordeaux (~33%), in France (~50%) and in Europe (~87%).

Strengths



High-level academic and research-oriented education about the synthesis, characterization and processing of all classes of materials including:

- › Chemistry and Physics of Materials during the first year.
- › Specialization in one of the seven programs offered by the partner universities.



Improved integration capacity into either academic or industrial R&D teams.



Enhanced employability thanks to innovative learning practices that help students develop a creative thinking mindset and leadership skills, along with awareness of social and industrial needs.



Strengthening of an international culture, including fluency in English, mobility as well as experience of the languages and culture of the countries visited.

Contact

General information on the FAME program:

- › Master FAME coordination:
master.fame@grenoble-inp.fr

Information on the Bordeaux / Darmstadt track:

- › Dr. Michael Josse:
michael.josse@u-bordeaux.fr
- › Florina Camarasu:
florina.camarasu@u-bordeaux.fr

www.fame-master.eu / www.emmi-materials.eu

How to apply?

Online application: www.fame-master.eu

Deadlines:

- › Erasmus Mundus scholarship: 1st recruitment wave in mid-January.
- › Self-funded students, students applying for external grants (IdEx, Eiffel, DAAD, Aquimob...): 2nd recruitment wave in mid-April.

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TOMORROW'S SUCCESS
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MASTER

Physical- Chemistry and Chemical-Physics (PCCP)

Program factsheet

ACADEMIC COOPERATION

Consortium of 6 universities:

- › France: University of Bordeaux (UBx)
- › Belgium: Université de Namur
- › Ecuador: Universidad San Francisco de Quito (USFQ)
- › The Netherlands: Universiteit Leiden
- › Spain: Universidad del País Vasco
- › USA: Colorado School of Mines (CSM)

LEVEL

- › Master of Science in Chemistry (specialization in Physical-Chemistry and Chemical-Physics)
- › Dual Master agreement with USFQ and CSM.

LANGUAGE REQUIREMENTS

A good level of English is required: level B2

- › M1: 70% of classes are taught in English
- › M2: all classes are taught in English

ADMISSION REQUIREMENTS

Candidates must fulfill the following:

Hold a Bachelor degree of Science in Physical-Chemistry, Chemistry, Physics or an equivalent degree.

PROGRAM DURATION

2 years (120 ECTS).

FEES AND SCHOLARSHIPS

- › University registration fees (scholarship students exempted): 200 to 400€. For dual Master degrees, specific fees are applied.

Scholarships are available for the mobility period:

- › International Masters grants: for Bordeaux students, covering 5 to 9 months in one university of the consortium
- › IdEx Laphia grants (photonics projects)
- › Aquimob grants: www.aquimob.fr
- › Eiffel grants: for international students, covering a full year in Bordeaux
- › Mobility grants from partner institutions.
- › Erasmus program scholarships

Strengths

- › High-level educational and research environment, proposed by the partner institutions
- › Master students acquire project management skills at an international level
- › Mobility during the second year offers access to a wide range of courses and training
- › Dual Master degree opportunities with the USA and Ecuador
- › International mobility facilitates integration within both academic and industrial domains
- › Supported by the International Masters program within the Bordeaux "Initiative of Excellence"

Program outline

The PCCP program aims to integrate Master students within academic and industrial fields of fundamental physical chemistry. Various aspects are concerned: study of matter and its transformations, analysis and control of physical and chemical processes, light-matter interactions and spectroscopy techniques, modelling of physical and chemical processes from molecular to macroscopic scale.

Applications cover scientific fields ranging from nanotechnologies, photonics, optoelectronics and organic electronics, to environmental sensors and detection systems.

The PCCP Master is supported by high-level educational and research partners, represented by the consortium of universities engaged in the program. Students follow their courses within a challenging, international environment.

Annual summer schools, organized by the consortium partners, complete the students' training by offering a focus on several topics relative to PCCP.

The first year of the Master degree is focused on the fundamental aspects of Physical Chemistry (thermodynamics, quantum chemistry, spectroscopy and numerical tools). The second year is dedicated to specialized topics (advanced spectroscopy and imaging, photonics, computational chemistry, environmental sciences).

Master students choosing to follow specific dual Master agreements with CSM or USFQ will spend part of their two-year program at the partner universities. Upon completion of these specific programs, graduates will obtain a dual Master degree.

International aspects of the program are introduced progressively during the first year, with most courses taught in English. A remote research project is also organized to promote collaboration between students of the partner universities within the context of international scientific project management.

The second year is fully taught in English and international mobility is mandatory (at least during the second semester for the Master thesis work), thus strengthening the international dimension of the degree. Numerous mutualized lectures are carried out featuring high-level, local research activity. Practical aspects are emphasized to favor the future integration of the student within the working world.

Year 1:

Courses are in French, except when international students are attending

- › Numerical methods (6 ECTS)
- › Thermodynamics (6 ECTS)
- › Quantum mechanics (6 ECTS)
- › Inorganic materials or structural analysis (6 ECTS)
- › Theory of chemical bond (6 ECTS)
- › Solid state physics (6 ECTS)
- › Analytical chemistry (6 ECTS)
- › Spectroscopy (6 ECTS)
- › Quantum Chemistry and molecular simulation (6 ECTS)
- › Remote research project / English (6 ECTS)

Year 2:

Courses are in English

- › Photonics, lasers and imaging (6 ECTS)
- › Dielectric and magnetic properties (6 ECTS)
- › Large scale facilities or auto-assembly, polymers and surfactants, or hybrid and nano-materials (6 ECTS)
- › Computational chemistry or energy, communication and information (6 ECTS)
- › Research project / English (6 ECTS)
- › Professional project (6 ECTS)
- › Master thesis / internship in one of the universities of the consortium (24 ECTS)

→ And after?

After graduation, students are fully prepared to pursue doctoral studies and a career in research. They may also work as scientists or R&D engineers within the industrial field.

Associated business sectors:

- › Chemical analysis
- › Chemistry of the atmosphere and environmental science
- › Energy and photovoltaic technologies
- › Nanotechnologies
- › Aeronautics and space
- › Chemical industries, pharmaceutical technologies
- › Fine chemicals and cosmetics
- › Forensic science and artwork restoration
- › Molecular modeling and simulation

Academic research domains:

- › Spectroscopy / analytical chemistry
- › Astrochemistry
- › Properties of materials, solid state physics, reactivity at the interfaces
- › Nanotechnology
- › Imaging, bio-detection
- › Organic electronics, optoelectronics, and photonics
- › Theoretical chemistry, molecular modeling and simulation etc.

Other possible activities:

- › Teaching, education and dissemination of scientific knowledge
- › Linking public and private actors in research, development and marketing
- › Participating in the purchase and investment of scientific equipment

Contact

masterpccp@u-bordeaux.fr

COORDINATOR:

Cédric Crespos
+33 (0)5 40 00 63 10

cedric.crespos@u-bordeaux.fr

<http://masterpccpbordeaux.wix.com/pccp>

How to apply?

- › Applications may be completed online:
<http://masterpccpbordeaux.wix.com/pccp>



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TOMORROW'S SUCCESS
STARTS **TODAY**

MASTER

Advanced Materials

Program factsheet

ACADEMIC COOPERATION

International partnership with:

- › University of Cincinnati (USA)

ADMISSION REQUIREMENTS

Candidates must fulfill the following:

Hold a Bachelor degree with honors or 3-year / 180 ECTS equivalent in chemistry, physical chemistry or materials science.

PROGRAM DURATION

2 years (120 ECTS).

LEVEL

Master degree in Chemistry.

For those following the international Master with the University of Cincinnati, a double Master degree is awarded.

LANGUAGE REQUIREMENTS

A good level of English is required:

- › IELTS score around 6.5; TOEFL score 79-93; minimal TOEIC score 900
- › Students with lower marks may be considered.

FEES / BUDGET

- › University registration fees : 400€
- › Some grants are available for selected students, which cover tuition fees and also include funds for everyday life: a maximum of 8,000€ for Master Year 1, a maximum of 5,000€ for Master Year 2.

Program outline

The aim of this Master program is to provide students with a complete training in the domain of Chemistry and Physical Chemistry of Materials, starting from the stage of conception, synthesis and elaboration, to physico-chemical characterizations, and their use for specific functions and applications.

The studied materials are diverse (inorganic materials, polymers, colloidal materials, hybrids, composites etc...) and draw upon the main research fields studied within the laboratories of the University of Bordeaux.

Thanks to the partnership with the University of Cincinnati (USA), a double Master degree is awarded to selected students. These students spend the first year of the Master program at the University of Cincinnati (*for more information, consult the website: www.artsci.uc.edu/departments/chemistry/graduate-programs/about-the-master-s-program.html*).

Strengths



Students develop skills based on the large range of materials topics studied in the University of Bordeaux campus laboratory: inorganic materials, colloids, polymers, hybrid and composite materials etc...



Students are trained and equipped to enter both academic (fundamental research) or industrial (more applied research) fields. Whatever their profile, upon completion of their studies, they master a high level of skills in materials science.



Students have the opportunity to test and apply their skills during two training periods occurring in Year 1 (two months) and Year 2 (six months) of the Master. These training periods most often take place in the chemistry labs (eight in total) located on the Bordeaux campus but other opportunities are available and may arise in other academic or industrial laboratories..



The University of Bordeaux has been identified as a **Campus of Excellence** for the field of Materials.



University
of Bordeaux,
France

Year 1 (UBx)

Semester 1

Teaching is divided into two semesters which include five modules of 6 ECTS each:

- › Chemical bonding (6 ECTS)
- › Characterization techniques (6 ECTS)
- › Structural analysis of solids and surfaces (6 ECTS)
- › Introduction to colloids and polymer science (6 ECTS)
- › Elaboration of inorganic materials (6 ECTS)

Semester 2

- › English/French dedicated courses (3 ECTS)
- › Training period (two months), generally within the Bordeaux campus labs.

Training periods in industrial labs or any other chemistry labs (in France or abroad) are permitted if opportunities arise (2 ECTS)

- › Conference series held by different lab directors on campus (1 ECTS)
- › Solid state physics (6 ECTS)
- › Mechanical behaviour from fluids to solids (6 ECTS)

Students must choose two modules from the following options:

- › Transformations (6 ECTS)
- › Physical chemistry of polymer solutions (6 ECTS)
- › Phase transitions and phase diagrams (6 ECTS)
- › Macromolecular chemistry (6 ECTS)

Year 2 (UBx)

Semester 1

The first semester offers several teaching modules.

Students must choose four modules from the following eight:

- › Innovative and composite materials (6 ECTS)
- › Material dielectric and magnetic properties (6 ECTS)
- › Self-assembly in surfactant and polymer solutions (6 ECTS)
- › Photonics, laser and imaging (6 ECTS)

- › Latex and emulsions (6 ECTS)
- › Energy, communication and information (6 ECTS)
- › Large-scale facilities (6 ECTS)
- › Hybrids and nanomaterials (6 ECTS)

Students must also follow the two modules:

- › English or French tutorials (3 ECTS)
- › Entrepreneurship (3 ECTS)

Semester 2

- › Five month training period in academic or industrial laboratories

How to apply?

Please send your CV and Bachelor degree certificate (including your grades) to:

› corinne.jalibert@u-bordeaux.fr
(Corinne Jalibert)

with copies to :

› mondain@crpp-bordeaux.cnrs.fr
(Prof. Olivier Mondain-Monval)

› francis.rebillat@u-bordeaux.fr
(Prof. Francis Rebillat)

A special committee examines the candidate CVs.

Double degree

For those students applying for the double Master degree with the University of Cincinnati, candidates are selected on the basis of an interview and their academic record.

→ And after?

- › Master students with good marks may apply for PhD applications in chemistry labs. The local labs offer many opportunities with funding included from various agencies. After a PhD, the majority of our students find employment in the R&D department of chemical companies of various sizes.
- › Master students who do not wish to apply for a PhD have a suitable profile for engineering positions in companies.

Contact

COORDINATORS

Prof. Olivier Mondain-Monval: mondain@crpp-bordeaux.cnrs.fr

Prof. Francis Rebillat: francis.rebillat@u-bordeaux.fr

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TOMORROW'S SUCCESS
STARTS **TODAY**

MASTER Advanced Materials Innovative Recycling (AMIR)

Program factsheet

CONSORTIUM

Six universities:

- › France: University of Bordeaux
- › Portugal: NOVA University of Lisbon
- › Belgium: University of Liege
- › Germany: Technical University of Darmstadt
- › Spain: Technical University of Madrid
- › Hungary: University of Miskolc

Five research and technological organizations:

- › France: CEA, the French Alternative Energies and Atomic Energy Commission
- › Belgium: CRM Group (Centre de Recherches Métallurgiques)
- › Germany: Fraunhofer Society
- › Spain: Spanish National Research Council (CSIC); Tecnalia

Three large industries:

- › ArcelorMittal, Arkema, Veolia (VERI)

LEVEL

Master of Science in Chemistry (specialization in Advanced Materials Innovative Recycling).

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor degree in Engineering and Environmental Sciences with advanced knowledge in Chemistry (minimum 3 years of study / 180 ECTS), or a Bachelor degree in Chemistry, Physical-Chemistry, Materials (or Matter) Sciences.

LANGUAGE REQUIREMENTS

This Master program is taught entirely in English. Students must possess a good level (level B2) of English.

PROGRAM DURATION

2 years (120 ECTS).

FEES AND SCHOLARSHIPS

- › 2,000€ per year for students from Erasmus+ 'program countries', 4,000€ per year for students from 'partner countries'.

Scholarships:

- › EIT-labelled "AVSA" grants of 13,500€ guaranteed to all successful candidates, for both EU and non-EU students.
- › Additional merit-based grants for students spending the 1st year of the program at the University of Bordeaux (grants awarded for the 2nd year - 650€ per month for 9 months maximum, and 650€ travel bonus for non-EU students).

Program outline

The AMIR Master program focuses on the raw material value chain, with particular emphasis on recycling. The two main objectives are:

- › Educate students to become highly-skilled European professionals with expertise in various types of materials. This expertise will enable them to develop, at a large and ambitious scale, new methods for material recycling. In addition, the AMIR program includes classes on transferable skills such as innovation, ethics, intellectual property, life cycle assessment, sustainability and advanced research strategies.
- › Develop a deep entrepreneurship mind-set with the help and expertise of associated businesses, incubators and innovation services as well as a large panel of industries.

Mobility

Students choose to spend their first year at either the University of Bordeaux or NOVA University of Lisbon, and then choose their second year destination at the beginning of their 2nd semester.

- › Consult the website: www.amir-master.com/program for details about the course content at each consortium member.

Program structure

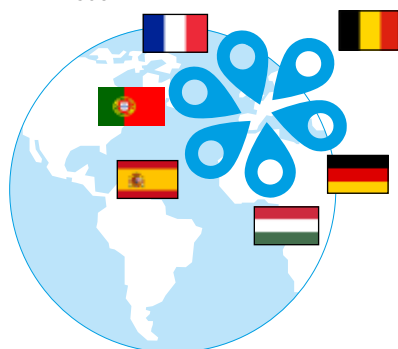
The first year of the Master program takes place at either the University of Bordeaux or NOVA University of Lisbon and includes a module focused on entrepreneurship

Students learn about general and technical aspects of the raw material value chain (general chemistry, material science, lifecycle of materials) as well as about the main outcomes of the European Institute of Innovation and Technology (EIT): sustainability, intellectual transformation, value judgments (ethical, scientific and sustainability challenges), creativity, innovation, leadership and entrepreneurship.

Year 1

Advanced materials & recycling, transversal knowledge (60 ECTS)

- › Bordeaux
- › Lisbon



The third semester is dedicated to a specialization in one of the partner universities (see below). This part of the program offers the possibility to follow selected advanced materials classes for various applications (energy, e-mobility - magnets, transport, environments - catalysis, etc.). The specializations are: material design for recycling in Darmstadt, metallurgy and metals recycling in Liege, mineral recycling for construction and other sectors in Madrid and glass, rubber and polymer recycling in Miskolc.

The program is completed with a three to six months' internship (Master thesis).

Year 2

Disciplinary knowledge: engineering and innovation (60 ECTS)

Specializations:

- › Darmstadt: material design for recycling
- › Liege: metal recycling
- › Madrid: mineral recycling
- › Miskolc: polymer recycling

Bordeaux: intellectual transforming skills for innovation

Industry internship (30 ECTS)

Arkema, Arcelor-Mittal, Veolia or research & technology organizations: CSIC, BRGM, CEA, CRM, Fraunhofer, etc.

Strengths



AMIR graduates are international entrepreneurs and innovators, able to work anywhere in Europe and beyond.



High-level education and research environment.



Practical insights with advanced research labs.



High-quality internships.



Mandatory international and intersectoral mobility.



Supported by the European Institute of Innovation & Technology (EIT) and the International Master program of the Bordeaux "Initiative of Excellence" (IdEx).

How to apply?

The application procedure may be consulted on the website:
www.amir-master.com

→ And after?

- › The AMIR program benefits from a strong academic, research and industrial network.
- › After graduation, students are fully prepared to integrate the working environment as professionals in the recycling sector (process optimization, materials design, plant administration, project management, etc.) whether it be in the industrial field or governmental organizations. Possible sectors include: information and communication technologies, building construction, energy, machinery tools, mobility.
- › Graduates also obtain the necessary skills and knowledge to set up their own company or work in sales and marketing.
- › Finally, further doctoral studies are another possibility and students may apply for Ph.D. programs in Europe, including those offered in the framework of the European Multifunctional Materials Institute (EMMI : www.emmi-materials.eu).

Contact

amir-master@eitrawmaterials.eu
www.amir-master.com



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TOMORROW'S SUCCESS
STARTS **TODAY**

MASTER Advanced Materials for Innovation and Sustainability (AMIS)

Program factsheet

CONSORTIUM

Five universities:

- › France: Grenoble INP, University of Bordeaux
- › Finland: Aalto University
- › Germany: T.U. Darmstadt
- › Belgium: University of Liège

Industrial Partners:

- › Luxembourg: ArcelorMittal
- › France: Arkema, CEA
- › Germany: Fraunhofer
- › Belgium: IMEC

LEVEL

Master of Science in Chemistry.

PROGRAM DURATION

2 years (120 ECTS).

ADMISSION REQUIREMENTS

Candidates must fulfill the following:

- › Applicants should hold a Bachelor's degree in Science/Technology or Engineering (Physics, Chemistry, Materials Science) or its equivalent within the year of application.

LANGUAGE REQUIREMENTS

This Master program is taught entirely in English. Students whose native language is not English must pass the TOEFL or IELTS exams.

IELTS :

- › Overall Band Score: 6.5
- › Writing Band Score: 5.5

TOEFL:

- › Total score: 92 (IBT), 580 (PBT)
- › Writing score: 22 (IBT), 4.0 (PBT)

FEES AND SCHOLARSHIPS

- › European students: 1,000 euros/year
- › International students: 8,000 euros/year
- › Costs include institutional tuition fees, insurance and participation in teaching activities (lab courses, MSc research project etc.)
- › Students applying for scholarships: mid-February
- › Other students (self-funded): mid-May

Strengths



Develop expertise in the field of innovative and sustainable advanced materials.



Meet, study and work with relevant academic and non-academic contacts in the innovation and entrepreneurship ecosystem.



Gain a holistic view on value and process chains.



Acquire transferable skills through modern teaching methods. These transferable skills include: entrepreneurship, negotiation techniques, intellectual property, problem solving, working cooperatively and creatively, co-designing, and life cycle approaches.

Program outline



Labelled by the European Institute of Innovation and Technology (EIT), AMIS is a Master program in Advanced Materials for Innovation and Sustainability which explores the theme of "Substitution of critical or toxic materials in products for optimized performance". It also covers the topics of "Material chain optimization for end-of-life products" and "Product and services design for the circular economy" - all of which are central themes of the AMIS.

The primary focus of the AMIS program is metal and mineral raw materials. Bio-based and polymer materials are studied in view of their substitution potential. Other materials are also analyzed in the context of multimaterial product recycling.

In addition, the AMIS program includes a solid package of courses and project work in innovation and entrepreneurship.

Program structure

Mobility is integrated within the two-year program, during which students study at two of the consortium partner universities. Upon completion of the program, graduates are awarded 120 ECTS and a double degree delivered by two of the five partner institutions where they studied.

Students begin the Master program at Grenoble INP, Aalto University or T.U. Darmstadt. In their second year, students specialize in another partner university:

- › To attend the specialization year offered at the University of Bordeaux, prospective students must attend the first year at either Aalto University or the Technical University of Darmstadt.

Year 2 specializations are the following:

- › University of Bordeaux: Advanced Hybrid Materials: Composites and Ceramics by Design
- › T.U. Darmstadt: Functional Ceramics: Processing, Characterization and Properties
- › Aalto University: Nanomaterials and interfaces: Advanced Characterization and Modeling
- › University of Liège: Nanomaterials and Modeling
- › Grenoble INP: Materials Interfaces: Surfaces, Films & Coatings

Master 1: Basic level competencies.

Mandatory courses in:

- › Fundamentals of materials science
- › Applied materials
- › Modelling tools and materials
- › Innovation, business and entrepreneurship.

Joint collaboration courses with AMIS partners:

- › Inno project I: business model development and the commercialization process of new technologies.
- › Summer camp: a week intensive course working in teams on industry case studies to create and produce new ideas, innovative technologies, improved products or services.
- › Internship: work experience in a company or research organization to develop a solution-focused approach by translating innovations into feasible business solutions and commercializing new technologies.

Master 2: Specialization year.

Mandatory courses in:

- › Advanced functional materials with a specialization in material interfaces, nanomaterials, ceramics or hybrids.

Joint collaboration course with AMIS partners:

- › Practical work on various industrial projects integrated with innovation and entrepreneurship contents.
- › Inno project II: a specialized approach on business model development and commercialization process of new technologies.

Master thesis:

- › A research and development experience in material science jointly supervised by the home university professors and the host partners. The results of the Master thesis will be defended during a presentation. Certain subjects may lead to setting up a business or a spin-off.

How to apply

- › Applications may be completed online:
www.amis-master.eitrawmaterials.eu

→ And after?

As a resource engineer, students may continue in the following fields:

Freelance and entrepreneurship:

- › Create a business or become a consultant

Resource industry:

- › SMEs in chemistry, exploration, green energy, machinery and plant construction, metal working industry, ceramics, environmental economy (R&D, product development, management, production, marketing and sales)

Research:

- › Universities, research institutions, lecturer or managerial position
- › Circular economy
- › Production, analytics, management, marketing and sales

And also:

- › Science journalism, consulting, project development and management, advisor to policy makers, administration, specialist agencies and media.

Contact

Michael Josse

- › michael.josse@icmcb.cnrs.fr

Sarah Fignes

- › sarah.fignes@u-bordeaux.fr

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TOMORROW'S SUCCESS
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MASTER

Light Sciences & Technologies

Program factsheet

ACADEMIC COOPERATION

The Master in Light Sciences and Technologies is managed by the University of Bordeaux and the Institut d'Optique Graduate School (IOGS).

Strong partnerships with:

- › Canada: Université Laval & Institut National de la Recherche Scientifique (INRS)
- › Germany: Abbe School of Photonics, (FSU Jena)
- › South Korea: Yonsei University
- › Brazil: São Paulo State University (UNESP)

LEVEL

Master of Science.

PROGRAM DURATION

2 years (120 ECTS).

LANGUAGE REQUIREMENTS

Program taught entirely in English, a B2 level (minimum) is required.

ADMISSION REQUIREMENTS

Candidates must fulfill the following:

Hold a Bachelor degree in Physics, Chemistry, Biology or equivalent.

FEES AND SCHOLARSHIPS

- › Annual registration fees for all selected applicants are calculated according to the rules and regulations of the University of Bordeaux
- › Scholarships may be granted to selected applicants according to criteria of excellence

Program outline

The international Master in Light Sciences and Technologies (LIGHT S&T) is part of the University of Bordeaux Graduate Research School. Selected within the French "Investments for the Future" program as an "Initiative of Excellence", the program focuses on knowledge and innovation in light sciences and technologies, providing a multidisciplinary environment for first-class research and education.

Students are offered cross-disciplinary training with a strong emphasis on innovation and entrepreneurship.

The Graduate Program in Light Sciences and Technologies is an integrated, interdisciplinary program, provided by both academic and industrial experts.

Scientific scope:

- › Extreme regimes of light
- › Light generation manipulation & detection
- › Light imaging & biophotonics

Strengths



› An integrated, interdisciplinary program, provided by both academic and industrial experts. The Master is embedded in a cross-fertilizing research environment, adapted to future professions within photonic industries.



› A cross-cutting and immersive training for students, thanks to the strong involvement of 15 research laboratories as well as industrial R&D centers.



› A "hands-on" training approach that provides graduates with valuable professional attributes. Training is delivered in state-of-the-art research facilities and infrastructures.



› International mobility and / or training within the industrial sector.

The program benefits from the support of the International Master program of the University of Bordeaux Initiative of Excellence (IdEx) and the French National Research Agency.

The LIGHT S&T training program is structured around 4 complementary pillars:

- › Scientific courses, lectures and practical training to acquire wide-ranging knowledge in the broad spectrum of light S&T.
- › Advanced practical sessions in laboratory courses along with an internship in an industrial or research oriented institution.
- › Research-based training that provides a strong skill set thanks to the interdisciplinary fields of research of the University of Bordeaux.
- › Transferable skills training (innovation and project management, entrepreneurship, market intelligence, business plan, communication, etc).

Semester 1

- › Preparatory courses cover the fundamentals of modern optics, structure of matter, quantum mechanics, thermodynamics and statistical physics, cell biology.
- › Core courses provide a comprehensive education in laser systems, light matter interaction, photonics, materials properties.
- › Practicum courses introduce experimental techniques in optics, chemistry and biophotonics.

Semester 2

- › Core and specialization courses.
- › Internship as practical training, preferably within the industrial sector and / or abroad.

Please note: students benefit from individual tutorship throughout all four semesters.

→ And after?

After graduation, students are fully prepared to pursue doctoral studies and a career in research. They may also work as scientists or R&D engineers within the industrial field.

Associated business sectors:

- › Light sources
- › Laser processing and 3D manufacturing
- › Sensors and multi-responsive detection systems

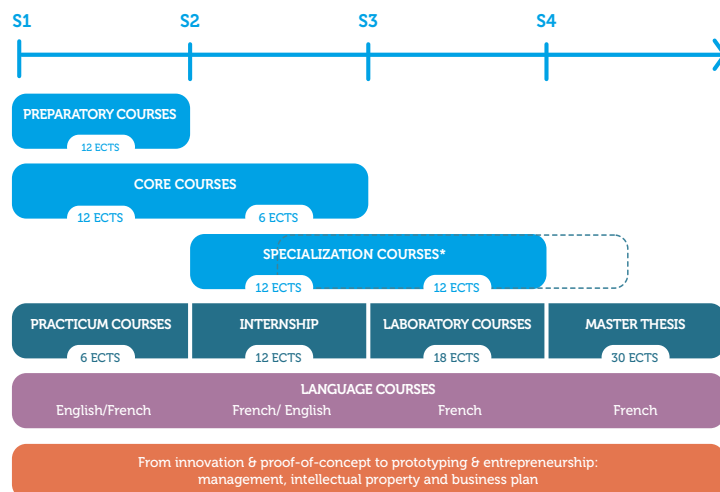
- › Smart and reconfigurable integrated photonics systems based on innovative hybrid nanotechnologies
- › Optical components and devices manufacturing
- › Innovative optical materials
- › Pharmaceutical companies (drug screening and testing)
- › Bio-imaging

- › **Other opportunities:**
- › Teaching, education and dissemination of scientific knowledge
- › Linking public and private actors in research, development and marketing
- › Participating in the purchase and investment of scientific equipment

Contacts

- › Email: contact.light-st@u-bordeaux.fr
- › Website: <https://light-st.u-bordeaux.fr>

OPERATIONAL SCHEME



* Specialization courses could be rescheduled between the semester 2 and 4 for international exchange adjustment

Semester 3

- › Specialization and laboratory courses delivered in cutting edge infrastructures and facilities.

Semester 4

- › The fourth semester is dedicated to a Master thesis carried out in an advanced research lab.

How to apply?

- › Please email: contact.light-st@u-bordeaux.fr

Documents necessary for the selection procedure:

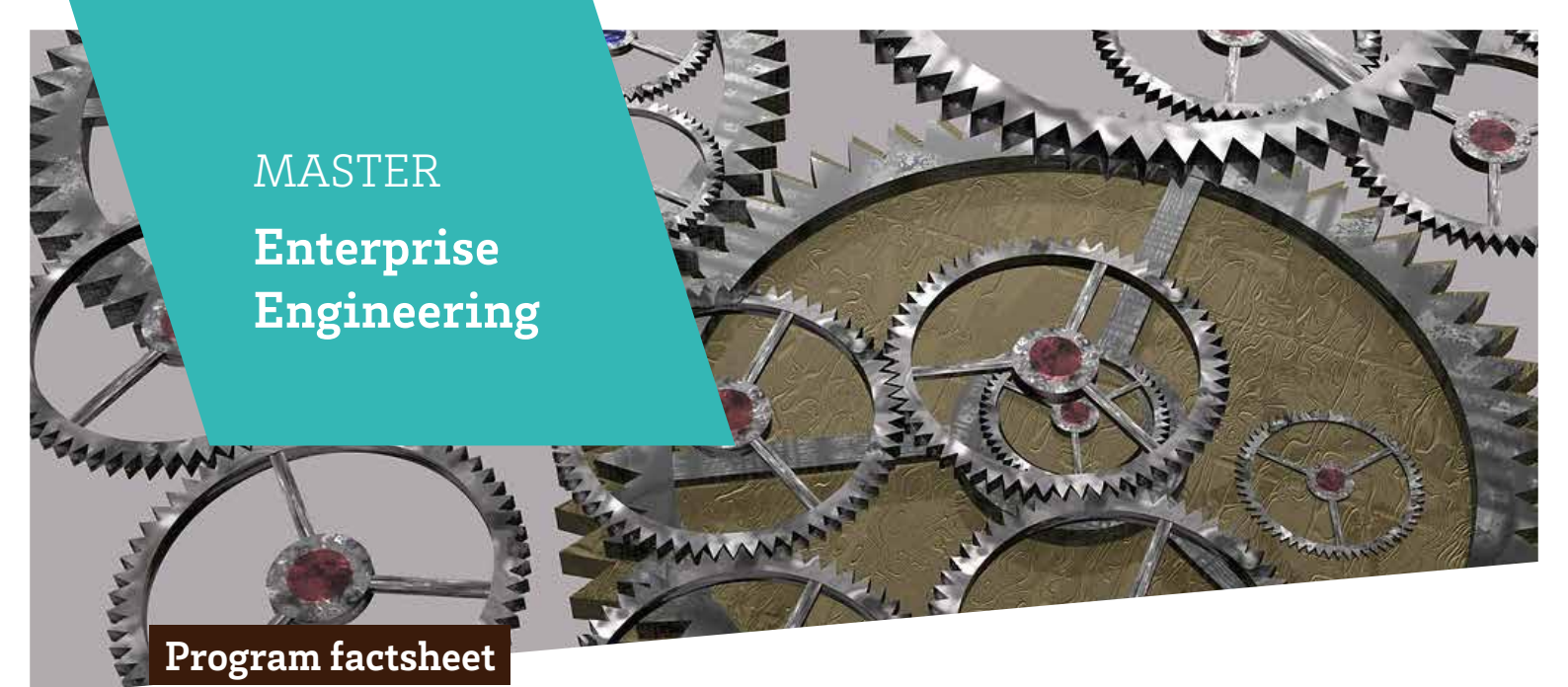
- › Official transcripts, copies of all previous diplomas
- › Copy of passport (or ID card if European)
- › Copy of birth certificate (if non-European)
- › Cover letter and CV (in English)
- › Letter of reference
- › Language test results (ECTS, TOIEC, IELTS, etc.) or certificate of studies from an English speaking High School



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MASTER Enterprise Engineering

Program factsheet

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor degree with four years of study in any field (240 ECTS equivalent), or have completed the first year of a Master within the domain of Science and Technology.
- › This international Master concerns students who have completed four years university studies and who wish to receive professional training in the area of Enterprise Modelling, Integration and Interoperability, with the goal of developing an international career.

› Admission is decided according to the diploma. If necessary, candidates are convened for an interview (face-to-face or via Internet).

LANGUAGE REQUIREMENTS

English: candidates must possess a good level of listening and writing in order to follow lectures and pass exams.

LEVEL

International Master (year 2).

PROGRAM DURATION

1 year (60 ECTS).

TUITION FEES

3,000€ including social security and health insurance.

Program outline

The Master of Enterprise Engineering program is organized over one year corresponding to semesters 9 and 10 (year 5) of the overall university education cycle.

Training takes place in France (Bordeaux) and is dedicated to the teaching of Enterprise Engineering. The first semester (September to December) is concerned with lectures, exercises and practical work; the second semester (January to July) is concerned with projects and an internship (within a company or a research laboratory).

The Enterprise Engineering program benefits from the expertise of the Industrial Engineering research group at the IMS laboratory, University of Bordeaux. This expertise is well recognized at national and international levels in the field of industrial engineering.

The Productics group has developed and maintained close relationships with the industrial world for more than 35 years.

Lectures, exams and internship report are conducted exclusively in English. The courses are validated by written and/or oral exams, and the internship is subject to a report/memoir and a presentation in front of a jury.

Once the Master studies are completed, graduates obtain a Master Degree of the University of Bordeaux, an official national diploma in France.

Program structure

Semester 1

SEPTEMBER TO DECEMBER

- › Information System and Interoperability (ISI)
(6 ECTS) - Compulsory
- › Enterprise Modelling (EMO)
(6 ECTS) - Compulsory
- › Production Management (PMT)
(6 ECTS) - Compulsory
- › Performance and Continuous Improvement (PCI)
(6 ECTS) - Compulsory
- › Supply Chain Management & Networked Enterprise (SCM) - (6 ECTS) - Compulsory

Semester 2

JANUARY TO JULY

- › Scientific Conferences and/or Projects (COS/PRO)
(6 ECTS) - Compulsory
- › Internship: Professional/Research (STA)
(24 ECTS) - Compulsory

Strengths



This international Master aims at training high level executives in the Enterprise System.



Students are capable of modelling, analyzing, designing and implementing organizational, technical and software application solutions to improve the performance of manufacturing and service enterprises.



Students may work and develop their careers in an international, professional environment, in particular within the context of industrial collaborations across the continents.



International network: the program welcomes international guest researchers from: Germany, Italy, Japan and the USA.

→ And after?

Employment opportunities mainly concern companies (large companies as well as small/medium companies) that have developed international industrial cooperation.

Job positions are found within the sector of the manufacturing industry as well as the service sector.

Some examples of these positions include: Head of Industrial Management (production, quality, maintenance), Manager of Design, Development and Implementation of Software Applications, Consultant, Project Leader, etc.

Contact

Mamadou Kaba TRAORE (professor, program supervisor)
mamadou-kaba.traore@u-bordeaux.fr

Myriam BOUTGES (secretary)
myriam.boutges@u-bordeaux.fr

How to apply?

The candidate must first send a short CV to the coordinator.

The pre-admission form may be downloaded from the University of Bordeaux website as of February / March:

- › <http://www.u-bordeaux.fr/Admission/Etudiants-et-rangers/Licence-et-Master>

Please note: this Master program welcomes a maximum of 20 students.

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TOMORROW'S SUCCESS
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MASTER Transfers-Fluids- Materials in Aeronautical and Space Applications (TFM-ASA)

Program factsheet

ACADEMIC COOPERATION

Consortium of three universities:

- › Germany: Brandenburg University of Technology Cottbus-Senftenberg (BTU)
- › Belgium: Université catholique de Louvain (UCL)
- › France: University of Bordeaux (UBx)

LEVEL

Students who successfully complete this international Master program in Engineering Sciences, including the compulsory mobility period, receive a joint French/German and Belgian diploma.

PROGRAM DURATION

2 years (120 ECTS).

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor degree in the fields of Engineering, Sciences and/or Technology.
- › Provide strong academic records within the domain of sciences, particularly in solid and fluid mechanics, thermal sciences, thermodynamics and material sciences.

LANGUAGE REQUIREMENTS

All courses are taught in English.

- › Students from English speaking countries must provide an official letter from the university confirming that English is the language of instruction.

- › For other students, the TOEFL* or IELTS** test must be passed before applying for the Master. For TOEFL, a minimum of 550, 213 or 79 points respectively for paper-based, computer-based and Internet-based TOEFL/TOEIC test is required. Marks of at least 6.0 (out of a total of 9) are required for IELTS test.

PARTICIPATION FEES

Students pay common participation fees which cover the national enrolment fees and services of each partner university.

For more information, please consult the website: www.tfmasa.eu

Program outline

The TFM-ASA program combines studies and research based on aerodynamics, thermodynamics, compressible flows, turbulence, propulsion, combustion, turbomachinery, material science, to name a few. These themes are all directly connected with technical and fundamental studies as well as with aircraft, spacecraft, drone issues, etc.

The program is jointly managed by three academic European partners (France, Germany and Belgium) together with the support and expertise of:

Bordeaux / France:

- › Industrial partners such as IRT St Exupery (Technological Research Institute), BAAS Society (Bordeaux Aquitaine Aéronautique et Spatial) and Aerospace Valley.
- › Leading research laboratories, strongly involved in the aeronautic field such as I2M, LCTS, IMB (UBx).

Louvain-la-Neuve / Belgium:

- › Applied Research Center CENEARO.
- › Research Laboratories: IMMC (UCL).

Cottbus-Senftenberg / Germany:

- › Closed collaborations with space agencies (ESA, DLR), ROLLS ROYCE, MTU Aero Engines.
- › Research Laboratory: CFTM² at BTU

These industrial partners provide specialized classes and internships to the program, thus providing the students with an overview about the actual issues faced by companies today.

The result is a top-quality, highly-renowned international Master degree that meets the 120 ECTS syllabus requirements and corresponds with current job market criteria.

Year 1:

Semester 1

Material Science and Structures (30 ECTS)

- › Simulation and design of structures (9 ECTS)
- › Continuum mechanics and finite element method applied to solid mechanics (6 ECTS)
- › Fatigue and fracture (3 ECTS)
- › Materials and aeronautical structures (6 ECTS)
- › Non-destructive evaluation for aerospace applications (3 ECTS)
- › Assembly-bonding (3 ECTS)

Semester 2

Aeronautical Engineering (30 ECTS)

4 mandatory courses out of 6

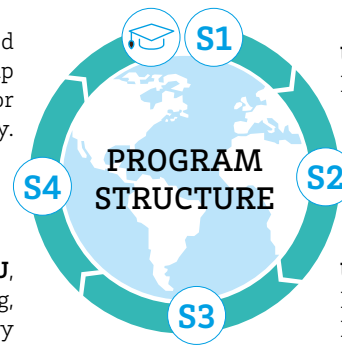
- › Internal combustion engines (5 ECTS)
- › Aerodynamics of external flows (5 ECTS)
- › Fluid compressors (5 ECTS)
- › Numerical methods in fluid mechanics (5 ECTS)
- › Quality management and control (5 ECTS)
- › Gas dynamics and reacting flows (5 ECTS)

Optional courses

Advanced Numerical Methods / Calculation of Planar Structures / Aerodynamics of External Flows / Thermodynamics of Irreversible Phenomena / Plasticity and Metal Forming

Master thesis linked to the internship within a laboratory or a company.

BTU,
Cottbus-Senftenberg,
Germany



UBx,
Bordeaux, France

UCL,
Louvain-la-Neuve,
Belgium

Year 2:

Semester 3

Advanced Fluid Mechanics, Thermodynamics, Heat Transfer (30 ECTS) 3 mandatory courses out of 5

- › Computational Fluid Dynamics (6 ECTS)
- › Engineering acoustics - sound fields (6 ECTS)
- › Modelling of turbulence (6 ECTS)
- › Thermodynamics, heat and mass transfer (6 ECTS)
- › Flow measurements (6 ECTS)

Semester 4

- › Master thesis (30 ECTS)
- › Internship in a research institute or a company, located preferably close to one of the three partners' locations but also anywhere in the world, upon prior acceptance of the Consortium.

Strengths



International program taught by experts (academics and industrial partners) from three different universities in Europe.



International mobility period in the partner countries (2 semesters).



Joint French/German and Belgian Master degree.



Close collaboration with industrial partners and research institutes with a guarantee of intensive training periods.

→ And after?

After graduation, students may access career opportunities such as:

- › Engineers in companies / engineering departments of aeronautical and space sectors.
- › Continuing their studies as PhD students and, after completion of their PhD, becoming postdoctoral researchers or assistant professors in universities or engineering schools.

How to apply?

Applications may be completed online: www.tfmasa.eu

Deadline:

- › Mid-March 2020

Contact

EXECUTIVE COORDINATORS

- › **Bordeaux:** Sakir Amiroudine / +33 (0)5 40 00 27 03
sakir.amiroudine@u-bordeaux.fr
- › **Cottbus:** Christoph Egbers, Michael Bestehorn
egbers@b-tu.de, bestehorn@b-tu.de
- › **Louvain-la-Neuve:** Vincent Legat / vincent.legat@uclouvain.be

ADMINISTRATIVE COORDINATORS

- › **Bordeaux:** Anna Gerykova / anna.gerykova@u-bordeaux.fr
- › **Cottbus:** René Grube / grube@b-tu.de
- › **Louvain-la-Neuve:** Emmanuelle Brun / emmanuelle.brun@uclouvain.be

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TOMORROW'S SUCCESS
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MASTER Algebra, Geometry and Number Theory (ALGANT)

Program factsheet

ACADEMIC COOPERATION

Part of the **ALGANT network**
(consortium of 10 universities):

- › **Canada:** Concordia University (Montreal)
- › **France:** Université Paris-Sud (Orsay), University of Bordeaux
- › **Germany:** Duisburg-Essen University, Regensburg University
- › **India:** The Chennai Mathematical Institute
- › **Italy:** Milano University, Padova University
- › **Netherlands:** Leiden University
- › **South Africa:** Stellenbosch University

Students follow this two-year Master course in two of the partner countries and, upon completion of the course, are awarded a double degree from the two universities.

LEVEL

Double/multiple Master degree of Science in Mathematics.

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor degree of Science in Mathematics or an equivalent degree.

LANGUAGE REQUIREMENTS

- › A good level of English is required.

PROGRAM DURATION

2 years (120 ECTS).

TUITION FEES

4,000€/year. A fee waiver may be granted.

Program outline

The ALGANT Master program provides a study and research track in pure mathematics, with a strong focus on algebra, geometry and number theory.

This track may be completed throughout Europe and the world, thanks to a partnership between leading research universities.

The ALGANT course introduces students to the latest developments within these subjects, and provides the best possible preparation for their forthcoming doctoral studies.

Program structure

The ALGANT program consists mainly of advanced courses within the field of mathematics and of a research project or internship leading to a Master thesis.

Courses are offered in: algebraic geometry, algebraic and geometric topology, algebraic and analytic number theory, coding theory, combinatorics, complex function theory, cryptology, elliptic curves, manifolds. Students are encouraged to participate actively in seminars.

The university partners offer compatible basic preparation in the first year (level 1), which then leads to a complementary offer for more specialized courses in the second year (level 2).

Each partner university offers a range of courses for the ALGANT program. For detailed information on the structure of the program in the different universities, please consult the partner university websites. You may also consult the ALGANT website (currently being updated).

In Bordeaux, the ALGANT program is structured as follows.

Year 1

Note: courses are taught in French.

SEMESTER 1

- › Modules et espaces quadratiques (9 ECTS)
- › Théorie des groupes (6 ECTS)
- › Analyse complexe (9 ECTS)
- › Analyse fonctionnelle (6 ECTS)

SEMESTER 2

- › Géométrie (6 ECTS)
- › Théorie des nombres (6 ECTS)
- › Théorie et distributions spectrales (6 ECTS)
- › Probabilités et statistiques (6 ECTS)
- › Cryptologie (6 ECTS)
- › Algèbre et calcul formel (6 ECTS)

Year 2

Note: courses are taught in English and the content is redefined each year. For details, please consult: www.u-bordeaux.fr and www.u-bordeaux.com

SEMESTER 1

- › Number theory (9 ECTS)
- › Algorithmic number theory (6 ECTS)
- › Geometry (9 ECTS)
- › Elliptic curves (6 ECTS)
- › Algebraic geometry (9 ECTS)
- › Analytic number theory: advanced course 1 (6 ECTS)

SEMESTER 2

- › Cohomology of groups: advanced course 2 (6 ECTS)
- › The key role of certain inequalities at the interface between complex geometry (6 ECTS)

Strengths



› Courses given by academic experts within the field of mathematics.



› Individually tailored study tracks.

Supported by the IdEx - International Master program of the Bordeaux Excellence Initiative.



› Top-quality scientific environment and facilities provided by leading global research institutes, e.g. Institut de Mathématiques de Bordeaux.

→ And after?

Students who successfully complete the ALGANT program will be well equipped to pursue a career in research by preparing a Ph.D.

They may also directly apply for positions as highly trained mathematicians, especially in the areas of cryptography, information security and numerical communications.

How to apply?

Applications may be completed on-line:

- › <http://emundus-maths.univ-bordeaux.fr/>

Contact

GENERAL COORDINATOR:
Peter Stevenhagen, Leiden University

COORDINATOR OF ALGANT-BORDEAUX:
Christine Bachoc

Contact for application and further information:
masterALGANT@math.u-bordeaux1.fr

www.algant.eu

University of Bordeaux,
France



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TOMORROW'S SUCCESS
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MASTER

Agro-Biomedical Science in Food and Health

Program factsheet

ACADEMIC COOPERATION

Consortium of three partner universities:

- › University of Bordeaux (France)
- › National Taiwan University (Taiwan)
- › University of Tsukuba (Japan)

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor's degree with honors, or 4-year / 240 ECTS equivalent in any field,
- › 1 or 2 years of professional experience in the field of international health.

LEVEL

Joint Master degree.

PROGRAM DURATION

2 years (120 ECTS).

LANGUAGE REQUIREMENTS

- › English: certifiable equivalent of TOEFL score of 501/173/61, TOEIC score of 600, or IELTS score of 5.0.

TUITION FEES

- › Master tuition fees applicable for the University of Bordeaux.

Program outline

This program trains students to become international professionals with the skills to carry out research and development in order to meet societal needs. Topics covered include the global-scale problems prevalent today in health maintenance and food security. The program tackles this challenge from a perspective that "food is medicine," or in other words, that both medicine and food originate from the same source and both preserve health.

Students benefit from the collaboration between three universities and spend at least one semester in each university. The program starts at the University of Tsukuba for the first semester, the National Taiwan

University for the second, followed by the University of Bordeaux for the third. For the final semester, students may choose one of the three universities.

In addition to the coursework delivered by each university, students also partake in field studies, corporate internships, laboratory practice and entrepreneurship training, provided by each establishment.

Classes and all other educational activities are taught in English.

Program structure

Three universities jointly organize the curriculum so that students acquire advanced knowledge and methodologies related to medical and agricultural sciences. They are also equipped with a global outlook that comes from practical training extending across Asia and Europe. The curriculum consists of the following subjects:

- › Foundation subjects,
- › Specialized subjects I,
- › Specialized subjects II.

At the University of Bordeaux, the Agro BioMedical Science International Master provides students with cutting-edge, research-based training in plant science,

biotechnology, health, nutrition, and food production. Teaching covers the latest developments in toxicology, cancer, drug discovery, global health, applied translational microbiology, global food security, animal based food stuff, nutrition, agriculture, crop production, green biotechnology, omics and bioinformatics tools.

Upon completion of the program, students are asked to present a comprehensive report on integrated themes including research results or plans for community / social action related to health and food. This report should be based on the overall learning from the two-year educational program. The presentation and oral examination are conducted in English.

Strengths

During their studies, students:

- › Acquire fundamental knowledge and skills regarding food security and health maintenance on a global scale.

- › Acquire knowledge on processes, from identifying problems to implementing solutions, in order to develop effective and innovative measures that overcome current problems regarding food security and health maintenance.

- › Develop skills in order to present and perform as leaders in international activities.

- › Develop their capacity to create and innovate thanks to a mix of interdisciplinary knowledge and advanced practical research.

- › Develop competencies to work for human and social welfare with an international perspective and cross cultural adaptability.

→ And after?

- › Graduates may go on to complete a PhD program, in the fields of plant science, plant biotechnology, global health, applied translational microbiology, global food security, animal based food stuff, nutrition, agriculture, etc. Graduates may carry out their PhD in one of the three universities involved in the academic cooperation, or in various Higher Education Institutes around the world.
- › Graduates may apply for positions in companies that specialize in private breeding, as well as those specialized in food and nutrition, the extraction and valorization of plants and natural products, global health, applied translational microbiology, the development of sustainable agriculture practices, quality and safety of food production, etc.

How to apply?

- › Applicants are assessed based on their application paperwork, a written assignment, group discussion, and interview in accordance with the admission policy.
- › Each university performs an initial selection, which is then reviewed jointly by all three universities.
- › Five candidates per university are admitted.

Contact

PROGRAM COORDINATOR:

Dominique Rolin

dominique.rolin@u-bordeaux.fr

www.master-bio-agro-bordeaux.com/agro-biomedical

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MASTER Biology Agrosciences (B2AS)

Program factsheet

ACADEMIC COOPERATION

Collaboration with:

- › Ecole Nationale Supérieure des Sciences Agronomiques de Bordeaux (France)
- › University of Tsukuba (Japan)
- › Hangzhou Normal University (China)
- › National Taiwan University (Taiwan)
- › Pontifical Catholic University of Chile (Chile)
- › University of Cincinnati (USA)

LEVEL

Master degree (Year 2).

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Master (Year 1) degree (60 ECTS) in any field related to biology with majors in molecular biology and/or biochemistry

LANGUAGE REQUIREMENTS

English: certifiable equivalent of TOEFL score of 550/213/79-80 or IELTS score of 6.0.

PROGRAM DURATION

1 year (60 ECTS).

TUITION FEES

Master tuition fees applicable for the University of Bordeaux.

Program outline

The Bordeaux Biology AgroSciences Master (B2AS) is part of the University of Bordeaux Master program and is developed with the support of the French National Institute of Agricultural, Food and Environmental Research (INRAE) and the Bordeaux AgroScience Engineer School.

The B2AS program offers an integrated multidisciplinary approach that is adapted to the realities of research (background research) as well as to the socio-economic sector (professional courses).

The program objectives are to train and equip researchers and professionals to face the issues posed by agriculture in the 21st century. This is achieved by integrating plant biotechnology and agrofood technology within course content in order to deal with the challenges of innovation in agriculture.

With such an integrated approach, the Master B2AS represents a meeting point between academia and professionals. During the program, students may specialize either in the field of plant biology, biotechnology, plant breeding, genetics, plant and human health benefits, food production and innovation.

The wide partner network provides students with a range of complementary expertise. This means that specific competencies are developed within the chosen field of biotechnology and plant breeding for agriculture improvements.

Strengths

During their studies, students will:

- › Acquire scientific knowledge in various fields of plant biology, green biotechnology, food supplements, food production, etc.
- › Receive a modern research-based training.
- › Develop an understanding of the challenges of modern agricultural practices in a context of environmental constraints and increasing demand.
- › Develop an understanding of the benefits and limits of modern biotechnology.
- › Acquire the skills to develop action planning processes for bioscience.
- › Acquire skills and practice within an English-speaking environment as well as other languages practised within the consortium.
- › Develop the necessary skills to collaborate with international teams and networks.
- › Acquire competencies for knowledge transfer to students and collaborators.
- › Develop competencies to create, finance and manage a new start-up.
- › Acquire an understanding of today's industrial and economic environment within the Biotech sector.

Program structure

Semester 1

Scientific English (3 ECTS)

- › Students will reinforce and develop the reading, writing, listening and speaking skills relevant to a biological science research context.
- › Students will acquire knowledge of the linguistic and discursive features of both written and spoken scientific English.
- › Structure and rhetoric of the research article, writing up an abstract. Oral scientific presentation – students prepare a mini-symposium on the topic related to their future work placement (and thus complete relevant bibliographical and reading research in preparation).
- › Students are evaluated on their communication skills in English and also on their ability to manage complex scientific concepts in English.

Plant development and reproduction (3 ECTS)

- › Genetic regulation of root and stem apical meristem functioning, epigenetic regulations of plant development and reproduction, parental imprinting, plant hormones, fruit and seed development, sex determination in plants, cellular mechanisms involved in plant organ growth and development.

Metabolism and cellular compartmentation (3 ECTS)

- › Metabolism and cell compartmentation: morphodynamic organization of the plant

secretory pathway, lipid and protein machineries; membrane transporters in plants and the related methods of study; lipid signaling in plant cells; formation and dynamics of membrane domains; regulation of metabolism and gene expression by sugars in plants. Nature and importance of futile cycles in plants.

Biotechnonology (3 ECTS)

- › In vitro culture and applications, plant transformation and applications to crop plants, GMO legislation and traceability, metabolic engineering, GMO and production of antibodies and of molecules of high health value, GMO in the food industry, fungi biotechnology.

Plant pathogen interactions (3 ECTS)

- › Plant-Mollicutes interactions, plant-virus interactions: analysis of plant and virus factors necessary for virus cycle, viroids; RNA interference, plant defence mechanisms against pathogens (fungi, bacteria and virus), breeding of plants resistant to pathogens, biodiversity of plant pathogens, epidemiology of plant pathogen interactions and impact on crop production.

Plant breeding (3 ECTS)

- › Principles of selection and genetic gain, response to selection, germplasm resources, collecting, analysing, classifying, international rules on germplasm resources. Population improvement and cultivar development

(breeding for lines, hybrids, clones, populations), high throughput phenotyping, breeding strategies and methods including molecular breeding (MAS, genomic selection) and biotechnologies, multiple traits selection, genotype by environment interaction, protecting varieties and intellectual property, plant breeding international network and organization.

Quantitative and population genetics and evolution (3 ECTS)

- › Population genetics and genetic diversity, haplotype structure, domestication and genetic consequences, linkage disequilibrium, genetic variance, estimating variance components, heritability, genetic correlations, association genetics, genomic selection, induced diversity TILLinG, natural diversity ecoTILLinG, linking genetics, genomics and bioinformatics : from fine-mapping to gene cloning; genotyping by sequencing.

Semester 2

Laboratory practice (6 months / 30 ECTS)

- › In a public laboratory and/or a private company laboratory.

→ And after?

The objectives of the B2AS program are to prepare students for further study via PhD programs and/or careers in the food and agronomy industry throughout the world. This is achieved by providing high-level training in plant sciences but also by preparing students with relevant knowledge and skills in management and business.

Graduates may apply for positions in the following industrial sectors in a R&D laboratory as well as in production activities:

- › Plant research laboratories
- › Plant breeding companies
- › Agro-chemical companies
- › Green and white biotechnology companies
- › Food, diet and nutrition companies
- › Plant medicinal production companies
- › Food supplement or nutraceutical companies
- › Pharmaceutical companies
- › Business trade companies

Contact

PROGRAM COORDINATOR:
Michel Hernould: hernould@bordeaux.inra.fr

PATHWAY PROGRAM COORDINATORS:
› philippe.gallusci@bordeaux.inra.fr
› rolin@bordeaux.inra.fr
› valerie.schurdi-levraud@u-bordeaux.fr

www.master-bio-agro-bordeaux.com

How to apply?

Exchange students:

Please refer to the following link:
<http://www.u-bordeaux.com/Studying/Applying-Registering/Within-an-Exchange-Program>

Other students:


Please send the following documents: CV, cover letter, description of the Master (Year 1) major and minors (or equivalent), English level certificate (TOEFL or IELTS) and two reference letters to Pr. M. Hernould:

- › hernould@bordeaux.inra.fr

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MASTER Bioinformatics and Omics (BAO)

Program factsheet

ACADEMIC COOPERATION

International partners:

- › University of the Basque Country, Bilbao, Spain (Genetics, Physical Anthropology and Animal Physiology Department).

LEVEL

Master of Science in Bioinformatics.

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor degree with honours, or the equivalent to four years of study (240 ECTS) in the field of biology.

PROGRAM DURATION

2 years (120 ECTS).

TUITION FEES

Master tuition fees applicable for the University of Bordeaux.

LANGUAGE REQUIREMENTS

A good level of English is required.

Program outline

The revolution in high-throughput sequencing technologies has led to the acquisition of gigabytes of data sequences and has generated new challenges in this latest era of "omics" data.

To exploit and analyze this data, the contribution of bioinformatics is essential and impacts the practices of training future biologists. A high level of computer skills is now essential to be able to use relevant software applications dedicated to "omics" data, while simultaneously enhancing the understanding of life science.

In this context, the Master of Bioinformatics of the University of Bordeaux and the *titulo propio* "Bioinformatics and Omics" of the University of the Basque Country has developed an international Master's program that offers a combined training of metagenomics and bioinformatics.

The Bioinformatics and Omics (BAO) international Master is a complete two-year program. It provides combined training with a double mobility period - Bordeaux (France) for the first semester and Bilbao (Spain) for the second.

Strengths

- › This international program is based on the metagenomics data expertise of the University of the Basque Country, and also on the teaching experience of the University of Bordeaux. This experience concerns the teaching of bioinformatics to biologists (as for the Master of Bioinformatics).
- › The BAO Master is a two-year post-graduate program, taught entirely in English, and designed to meet the new challenge of analyzing complex "omics" data at the interface of bioinformatics.

Program structure

Master 1

The fall semester takes place in Bordeaux, France.

Students from the universities of Bordeaux and Bilbao learn basics in computer programming in order to be able to:

- › analyze large and complex datasets,
- › build applications that can make predictions from data,
- › create systems that adapt and improve over time.

The spring semester takes place in Bilbao, Spain.

Students from the universities of Bordeaux and Bilbao gain skills in biological experimental data with the possibility of specializing in different fields ranging from biomedicine to ecology.

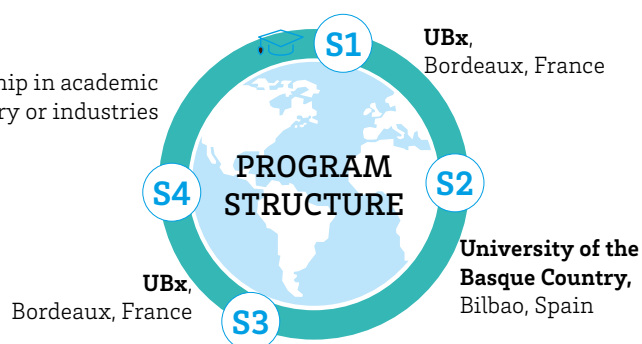
→ And after?

This interdisciplinary and international program offers many employment opportunities given the high demand in the academic sector (CNRS, INRA, INSERM, etc.) and private companies (biotechnology, pharmacology, agronomics or food science) to address new Big Data challenges that have resulted from the revolution of new technologies.

Upon completion, students may pursue a doctoral degree, or may be recruited as engineers in laboratories working on structural biology, molecular biology, pharmacology and bioinformatics.

Private biotechnology pharmacology, agronomics and/or food science companies are also interested in recruiting post-graduate students with a double competence in biology and computer science, strengthened by an international experience.

Internship in academic laboratory or industries



Master 2

The fall semester takes place in Bordeaux, France.

Students from the universities of Bordeaux and Bilbao:

- › exploit their skills in programming to learn/develop informatic solutions for the analysis and exploitation of omics data,
- › have the ability to specialize in different fields in biology, ranging from biomedicine to ecology. They may choose several case-based courses in biology.

The spring semester is dedicated to an international internship ranging from 4 to 6 months, in a private company or in an academic laboratory aboard.

How to apply?

Students may apply online:

- › <https://apoflux.u-bordeaux.fr/etudiant/>

Keep in mind!

- › Maximum number of students: 10
- › Selection: based on academic results and proven motivation for an international experience.

Contacts

Patricia Thebault
thebault@labri.fr

Jean-Christophe Taveau
jc.taveau@cbmn.u-bordeaux.fr

<https://master-bioinfo-bordeaux.github.io>

www.u-bordeaux.com

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TOMORROW'S SUCCESS
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MASTER

Neuroscience (NeuroBIM)

Program factsheet

ACADEMIC COOPERATION

Collaboration with:

- › Neurasmus consortium (Erasmus+ Master program of Neuroscience).
- › University of Tsukuba (Japan).
- › Other partner universities from the USA, Canada, Europe.

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor's degree (180 ECTS) or equivalent degree in biology, biochemistry, biomedical sciences, medical studies, pharmacy, cognitive sciences or psychology with a strong interest in Neuroscience.
- › Candidates with a Bachelor's degree

in another subject (chemistry, physics, maths, computer science) must provide documented interest in the field of Neuroscience.

- › Excellent grades are expected.

LANGUAGE REQUIREMENTS

Proficiency in English is required. Candidates should have adequate knowledge of written and spoken English, equivalent to B2 according to the CEFR.

LEVEL

Master degree.

PROGRAM DURATION

2 years (120 ECTS).

TUITION FEES

Master tuition fees applicable for the University of Bordeaux.

SCHOLARSHIPS

- › International mobility for traineeships is supported by Aquimob mobility scholarships and NeuroBIM (Bordeaux International Master of Neuroscience) IdEx grants.
- › Students completing their traineeship in a laboratory of the University of Bordeaux receive a monthly stipend (around 500€) during the traineeship.

Program outline

High standards

The Bordeaux International Master of Neuroscience emphasises training in cutting-edge techniques in all major topics of brain research, from molecules to cognition. Its main objective is to foster Neuroscience education and train new brain scientists, by offering a unique interdisciplinary and integrated approach from normal brain function to brain disorders.

Excellent teaching

In Bordeaux, about 30 professors and lecturers in Neuroscience are involved in teaching as well as many

neuroscientists and colleagues specialized in psychology, cognition, modeling, physiology, genetics, medicine, brain imaging, etc.

Top research / traineeships

Neuroscience in Bordeaux has grown over the last 15 years to become one of the largest Neuroscience scientific communities in France and in Europe, with over 600 people working in the various Neuroscience laboratories of the University of Bordeaux.

In order to meet the most important challenges facing Neuroscience research, all these laboratories are grouped within a virtual institute,

called the Bordeaux Neurocampus, a multidisciplinary consortium of world-renowned scientists. Bordeaux Neurocampus offers, together with our international academic partners, excellent opportunities for traineeships.

Interaction with the professional sector

Students have access to Pharma multinationals for traineeships through internationally oriented consortia such as Pierre Fabre, Sanofi-Aventis, Glaxo-SmithKline etc.

Program structure

International mobility is highly recommended for at least one of the two traineeships. Mobility fellowships are provided upon application.

Year 1:

Semester 1: September-January (30 ECTS)

Compulsory courses

- › Scientific Communication (3 ECTS)
- › Statistics and Neural Modelling (3 ECTS)
- › Tutored Project (3 ECTS)
- › Functional Neuroanatomy (5 ECTS)
- › Neurophysiology (4 ECTS)
- › Molecular Neurobiology, Development & Neurogenetics (4 ECTS)
- › Neuropharmacology (4 ECTS)
- › Higher Brain Functions (4 ECTS)

Semester 2: January-June (30 ECTS)

- › Laboratory Internship

Year 2:

Semester 3: September - January (30 ECTS)

Compulsory courses

- › Research Project Literature Survey & Methodology (9 ECTS)
- › Industrial Research (3 ECTS)

Optional courses

- › Cellular and Molecular Neurobiology (6 ECTS)
- › Cognitive Neuroscience (6 ECTS)
- › Pathophysiology of Neurological & Psychiatric Diseases (6 ECTS)
- › Neural Networks (6 ECTS)
- › Addiction (6 ECTS)
- › Experimentation in Behavioural Studies (6 ECTS)
- › Pharmacology of Psychotropic Drugs (6 ECTS)

Semester 4: January-June (30 ECTS)

- › Master Thesis Project

Strengths



Advanced scientific education and training with innovative and interdisciplinary brain research methodology.



Small classes and close contact with faculty staff.



Opportunities for international mobility.



Training through original research.

→ And after?

- › After graduation, students have access to career opportunities in the industrial sector, in clinical research or may carry out further fundamental research as PhD students.

How to apply?

Master / Year 1:

- › French & international students, consult the website: www.bordeaux-neurosciences-master.univ-bordeauxsegalen.fr

Master / Year 2:

- › French students, through the Apoflux platform (University of Bordeaux)
- › International students, consult the website: www.u-bordeaux.com/Studying/Applying-Registering/Outside-an-Exchange-Program

Contact

COORDINATORS:

Prof. Daniel Voisin: daniel.voisin@u-bordeaux.fr

Prof. Jacques Micheau: jacques.micheau@u-bordeaux.fr

SECOND YEAR OF THE PROGRAM:

Dr. Elena Avignone: elena.avignone@u-bordeaux.fr

Prof. Denis Combes: denis.combes@u-bordeaux.fr

www.bordeaux-neurosciences-master.univ-bordeauxsegalen.fr

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MASTER Neuroscience (Neurasmus)

Program factsheet

ACADEMIC COOPERATION

Collaboration between five partner universities:

- › Canada: Université Laval
- › France: University of Bordeaux
- › Germany: UMG Universitätsmedizin Göttingen Charité, Universitätsmedizin Berlin
- › Netherlands: Vrije Universiteit Amsterdam

Associated members:

Janssen Pharmaceuticals; Sartorius Stedim Biotech SA; Roche Pharma; Flying Health; Innoki; Caterna; Otto Bock; Biotronik; Osmunda; Sanofi; Scriptorium Consulting; Canadian Neuroimaging Platform (supported by Brain Canada, a national funding agency); Berlin Institute of Health; SPARK Berlin.

PROGRAM DURATION

2 years (120 ECTS).

Program outline

A European Master in Neuroscience: advanced courses and research training.

The Neurasmus program is a full-time Neuroscience study program offering a unique interdisciplinary and integrated approach of normal brain functions and diseases. It strongly emphasizes training in cutting-edge techniques in all major topics of brain research, from molecules to cognition.

The Neurasmus curricula are completely embedded in international-oriented local Master programs of the partner universities. Each program features among the best and most reputed national programs in Neuroscience.

* See website for details and information on what defines program and partner country students.

TUITION FEES

- › Available scholarships: Erasmus Mundus student scholarships
- › Self-funded program country students*: 2,250€ per semester (9,000€ for the 2 year-program)
- › Self-funded partner country students*: 4,500€ per semester (18,000€ for the 2 year-program)

LEVEL

Double / multiple MSc in Neuroscience. A Neurasmus joint diploma supplement is additionally awarded by the consortium.

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor's degree (180 ECTS) or a qualification in natural sciences.
- › A solid basic knowledge in general cell biology, as well as the basics of chemistry and biochemistry, physics and math is required.
- › Excellent proficiency in English.

LANGUAGE REQUIREMENTS

- › Candidates who completed their education in Canada, USA, UK, Ireland, New Zealand, South Africa, or Australia, do not need to provide an English certificates.
- › All other applicants (incl. candidates who hold a Bachelor or Master degree taught in English) need to provide evidence of their English language skills with any one of the following test scores:
 - › IELTS: 6.5 (no score below 6), Paper-based TOEFL: 580, Computer-based TOEFL: 237, Internet-based TOEFL: 92, Certificate of Advanced English: B/C, Certificate of Proficiency in English: B/C.



Co-funded by the
Erasmus+ Programme
of the European Union

The Neurasmus program is an Erasmus Mundus Joint Master Degree developed under the Key Action 1 of the Erasmus+ program. Action 1 fosters cooperation between higher education institutions and academic staff in Europe and Third Countries with a view to creating poles of excellence and providing highly trained human resources. Joint programs of outstanding academic quality are designed and implemented by a consortium of European universities from at least three different countries. Consortia may also include universities from other parts of the world.

Programs include obligatory study and research periods, in at least two universities, and award recognized double or multiple degrees.

Program structure

At the application stage, students choose the main track they wish to follow. This defines their first year mobility.

- › Track 1: Neurogenomics (120 ECTS)
- › Track 2: Neuropharmacology (120 ECTS)
- › Track 3: Imaging and Neurophysiology (120 ECTS)
- › Track 4: Clinical Neuroimaging and Translational Neuroscience (120 ECTS)
- › Track 5: High Resolution Imaging (120 ECTS)

Depending on the track chosen, students spend their first and second semesters in Amsterdam / Göttingen / Berlin / Bordeaux.

Semester 1 and 2

Core curriculum

Students are introduced to the different domains of Neuroscience and provided with the basic knowledge they need through a commonly agreed core curriculum (core courses).

In addition, every student conducts research projects (laboratory rotations) in different participating departments. Research projects involve experimental work, data analysis and a written laboratory report.

Semester 3

Advanced courses

The choice of the advanced courses (30 ECTS), in association with the initial track, will define the subspecialty training obtained by the student.

Semester 4

Master Thesis

Students complete a six month research project or industrial placement leading to a Master Thesis (30 ECTS). It takes place in a location defined according to the Personal Training Plan. This location must be chosen in collaboration with the affiliated partner university.

Strengths

Scientific education and training with innovative and interdisciplinary brain research methodology.

Research projects (laboratory rotations) involving experimental work and data analysis.

Common workshops bringing together students and university representatives.

Small classes and close contact with faculty staff.

International learning environment with high-level mobility opportunities.

Attractive scholarships.

→ And after?

- › On completion of the Master program, students are qualified candidates for different exchange and training PhD programs currently available among the consortium members.
- › Graduates will have also the possibility to pursue their studies at PhD level at any of the consortium graduate schools (www.enc-network.eu) or at any other research institution worldwide.
- › Graduates interested in starting a career within the business sector, benefit from the industrial network of the consortium.

How to apply?

Students may apply online:

- › <http://emundus-neurasmus.univ-bordeaux.fr>

Contact

COORDINATION OFFICE: neurasmus@u-bordeaux.fr

Program Coordinator: Prof. Agnès Nadjar - **Administrative Manager:** Florina Camarasu

Neurasmus Application Helpdesk

All questions linked to the application process (help with the online application form, inquiries about admission & eligibility criteria, etc.) must be addressed to: neurasmus-application@u-bordeaux.fr

www.neurasmus.u-bordeaux2.fr

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MASTER

Euro-Mediterranean Master of Neuroscience (EMN-Online)



Program factsheet



COOPERATION

UNIVERSITIES IN EURO-MEDITERRANEAN COUNTRIES:

- › France, Italy, Poland, Spain, Sweden.
- › Egypt, Lebanon, Morocco, Tunisia.

LEVEL

Master degree.

PROGRAM DURATION

2 years (4 semesters, 120 ECTS).

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor in Life Science or three years study/ 180 ECTS equivalent in the field of Biomedical Science.

LANGUAGE REQUIREMENTS

Courses are taught in English and /or French. Candidates should have a B1 level of English or equivalent.

TUITION FEES

Annual tuition fees for EU / non EU students:

- › According to the student's home university.

Program outline

This international Master program specializes in neurobiology and biotechnology, providing high-level, interdisciplinary neuroscience training with an emphasis on innovative e-learning methods.

High-level, interdisciplinary training in neuroscience is conducted with students studying theoretical concepts together with a broad range of experimental methods used in biotechnology and biomedicine.

Individual projects in neuroscience and biotechnology are carried out, requiring the elaboration and communication of scientific data and concepts. Students also master the competencies necessary to implement modern techniques and manage complex, experimental set-ups.

Teaching follows standards of excellence and is provided by international experts of the consortium. This consortium offers a large variety of top-level research labs for student training. In addition, consortium partners extend this offer with opportunities in their laboratories. Throughout their study and training, students develop connections and network across Europe and the Mediterranean region.

EMN-Online follows the European system of postgraduate studies with equivalent credit value. The courses and evaluation procedure are identical within all partner universities.

Note: the Master program is supported by an Erasmus+ European grant within the Strategic Partnership program (Neuronline project) as well as a grant from the Bordeaux Initiative of Excellence.

Program structure

This Master program covers a wide range of subjects from cellular to integrative physiology and behavioral neuroscience:

Year 1

Semesters 1 and 2

Acquisition of general concepts:

- › Cellular Neurobiology
- › Functional Neuroanatomy
- › Neural Basis of Cognition
- › Mechanisms of Neurological Diseases
- › Neuropharmacology
- › Developmental Neurobiology
- › Bioinformatics and Biotechnology
- › Language and Communication

Year 1

Semester 3

Societal implications of neuroscience (economy & bioethics)

Three specialized tracks in basic or applied neuroscience:

- › Molecular and Cellular Neuroscience
- › Integrative and System Biology
- › Medical Neuroscience and Neuroimaging

Semester 4

Practical training in an academic lab or a private company

Students may benefit from the consortium network in Europe and the Mediterranean region. Outside the EMN - Online consortium members, hosting labs are located in many countries worldwide including Germany, USA, Canada, Brazil, Australia, etc.

Strengths

International curriculum with identical core courses.

Open to students following initial training and lifelong learning methods.

Innovative teaching based on group work and flipped classroom with modern e-learning tools favoring student autonomy.

Development of a collaborative MOOC on the societal implications of neuroscience.

Specialization tracks based on the expertise of each partner in fundamental or biomedical sciences.

A unique, wide-range of complementary competences and methods that cover all fields of modern neuroscience, from molecular aspects to in vivo analysis.

A dense network of expert research labs and easy access to high-level, specialized core facilities.

Student R&D projects in academic and industrial fields.

Bilingual teaching and close collaboration between universities to promote international, mobility opportunities.

→ And after?

Graduates will be able to continue their studies with research:

- › Application to the PhD programs currently available in the consortium member's institutions, or in any research institution worldwide.

They may also apply for positions as the following:

- › Researcher, Service Engineer, Application Scientist, Bio-Medical Engineer, Sale Engineer, Healthcare Executive.

Contact

PROGRAM COORDINATOR:

Prof. Marc Landry

marc.landry@u-bordeaux.fr

<https://emn-online.org/>

How to apply?

The application procedure starts as of March and is processed via the Apoflux system.

Candidates should send their files to:

- › Prof. Marc Landry: marc.landry@u-bordeaux.fr
- › assistance.inscription@u-bordeaux.fr

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MASTER Cancer Biology

Program factsheet

PROGRAM DURATION

2 years (120 ECTS).

LEVEL

Master of Science degree.

TUITION FEES

Annual fees are calculated according to the rules and regulations of the University of Bordeaux. Consult the website www.u-bordeaux.com/Education/Tuition-fees for the latest information.

ADMISSION REQUIREMENTS

Bachelor degree or 180 ECTS equivalent in Biology or relevant Life Sciences field.

LANGUAGE REQUIREMENTS

Candidates should be proficient in English. A certificate may be requested proving a minimum of English B1 level according to the "Common European Framework of Reference for Languages" grid (European Union and Council of Europe, <http://euopass.cedefop.europa.eu>).

ACADEMIC COOPERATION

Students may carry out their internship with the following universities: Federal University of Health Sciences of Porto Alegre (Brazil), McGill University (Canada), University of Arizona (USA), University of Lisbon (Portugal), University of Missouri (USA), University of Saragossa (Spain) as well as with various international partners of the Cancer research laboratories at the University of Bordeaux.

Program outline

The Master in Cancer Biology is one of the four degree-granting tracks of the Biology and Health Master. The training program is primarily research-oriented with an emphasis on interdisciplinary approaches to the study of cancer.

The program includes two research internships in laboratories: a two-month long internship in the first year and a five-month long internship in the second year. Students learn about the fundamental bases and emergent areas in the field of cancer, from basic cell and molecular biology of cancer to translational and clinical research. They benefit from open access to state-of-the-art technological tools and direct interaction with expert scientists from the field of Cancer Biology.

The program covers the basic molecular and cellular mechanisms driving oncogenesis, the complex interacting cellular and molecular networks with the tumor microenvironment dictating cancer development and metastatic dissemination, the clinical aspects of cancer pathology and therapeutic possibilities. The development of critical analysis and creative skills that must be applied in the conception of research proposals, accessing and processing experimental data, and literature searches are also important components of the program.

Strengths



Strong connections to a network of research laboratories (French National Center for Scientific research - CNRS, French National Institute of Health and Medical Research - INSERM, the University of Bordeaux and international laboratories) dealing with a broad range of problematics in oncology.



A strong interdisciplinary research dynamic and learning environment, providing students with the possibility to interact with not only biologists, clinicians and other health professionals, but also physicists, mathematicians, chemists, computer scientists and philosophers of science working in the field of cancer.



State-of-the-art technologies for cancer modeling, diagnosis and treatments.

Program structure

Year 1:

Semester 1

- › Cancer cell biology (9 ECTS)
- › Bioinformatics and omics (3 ECTS)
- › Imaging and molecular histology (3 ECTS)
- › Experimental design in biomedical sciences (3 ECTS)
- › Molecular and cell biology techniques (9 ECTS*)
- › English (3 ECTS*)

Semester 2

- › Cancer immunobiology and immunotherapies (6 ECTS)
- › High-throughput sequencing and bioinformatics (3 ECTS)
- › Research internship (12 ECTS)
- › Molecular basis of pathologies (9 ECTS*)
- › Optional: animal experimentation training and certification (6 ECTS)

*Courses are common with other tracks of the Biology and Health Master program.

Year 2:

Semester 3

- › Microenvironment and tumor heterogeneity (6 ECTS)
- › Modeling and therapeutic innovation in cancer (6 ECTS)
- › Tutored interdisciplinary project (3 ECTS)
- › Communication and project conception (9 ECTS)

Two courses to be chosen from:

- › Concepts and causality in cancer (3 ECTS)
- › Microbiota and physiopathology (3 ECTS)
- › Pharmaceutical sciences (3 ECTS)
- › Other courses offered in the Biology and Health Master programs

Semester 4

- › Research internship (30 ECTS)

→ And after?

The Master in Cancer Biology prepares students for careers in academic research in biomedical sciences. They may pursue their studies further with a PhD or directly work in research laboratories as scientific staff.

It also prepares students to compete for careers in the industrial sector (biotechnology companies, particularly in product development for the diagnosis and treatment of cancer, in pharmaceutical companies or clinical analysis laboratories). Graduates of the program also have the opportunity of applying for different professional positions in the healthcare system, such as hospitals or clinics.

How to apply?

Applications may be completed online:

- › www.u-bordeaux.com/Education/International-study-offer/Masters
- › <https://apoflux.u-bordeaux.fr/etudiant/>

→ Keep in mind!

- › Expected number of students per year: 20
- › Selection procedure: an initial selection is based on students' CV and cover letter; a second level of selection may be based on an interview with pre-selected candidates.
- › Selection criteria: academic accomplishments at undergraduate level (grades, honors), research experience (e.g. internships), cover and recommendation letters.
- › All courses will be evaluated by one written final exam, which typically accounts for 50% of the grade, additional forms of evaluation depend on the specific courses chosen (these may include continuous evaluation, written reports, oral presentations, etc.).

Contact

- › bf-cancerbiology@u-bordeaux.fr



University of Bordeaux,
France

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TOMORROW'S SUCCESS
STARTS **TODAY**

MASTER

Environmental Contamination and Toxicology (ECT+)

Program factsheet

CONSORTIUM

6 universities:

- › Spain: University of the Basque Country (UPV/EHU) (coordinator institution)
- › France: University of Bordeaux (UBx), University of Pau and Pays de l'Adour (UPPA)
- › Norway: Norwegian University of Science and Technology (NTNU)
- › Portugal: University of Porto (UPO)
- › Belgium: University of Liège (ULiège)

LEVEL

Joint or Double Master of Science degree awarded by the consortium universities where the student has studied.

UPV/EHU, ULiège, NTNU and UPorto will deliver a Joint Diploma issued by UPV/EHU. A separate parallel Diploma (Double degree) is issued by either UBx or UPPA for students following Semester 1 in those institutions.

PROGRAM DURATION

2 years (120 ECTS).

Program outline

ECT+ is an Erasmus Mundus Joint Master Degree. Multidisciplinary and international, ECT+ provides postgraduate training in the fields of ecotoxicology, toxicology and environmental chemistry, with innovative practical components.

The program focuses on understanding interactions between chemical pollution, the contamination of living organisms and ecosystem disturbances. It also specializes in environmental health risk management, in relation to the use and disposal of chemicals in a scenario of global change.

Students benefit from advanced knowledge in a variety of disciplines such as analytical and environmental chemistry, ecotoxicology, cellular and molecular biology, global chemical issues, ecology, ecosystem health assessment, environmental policies and risk management, in accordance with European treaties, conventions and directives.

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Hold a Bachelor degree or equivalent from a European or third country university in the field of engineering, geosciences, oceanography, biosciences, veterinary, health sciences, chemistry, or environmental sciences.

LANGUAGE REQUIREMENTS

All courses are taught in English. Proof of proficiency in English is essential.

Applicants whose native language is not English are required to pass a recognized international English test such as TOEFL (score 220 CBT, 550 PBT, 80 IBT), Cambridge Advanced English Test (score B or higher), IELTS (score 6.5 or higher), TOEIC (800) or other English equivalent test, or an equivalent approved by the Joint Program Board of the Consortium (JPB).

TUITION FEES

Annual fees:

- › 9,000€ partner country¹ students
- › 4,500€ program country² students
- › Scholarships, fee waivers and degree loans available

¹Erasmus Mundus scholarship holders are exempted of fees

²See website for details and information on what defines program and partner country students: www.ectplus.eu/application-enrolment/fees/

Scholarships:

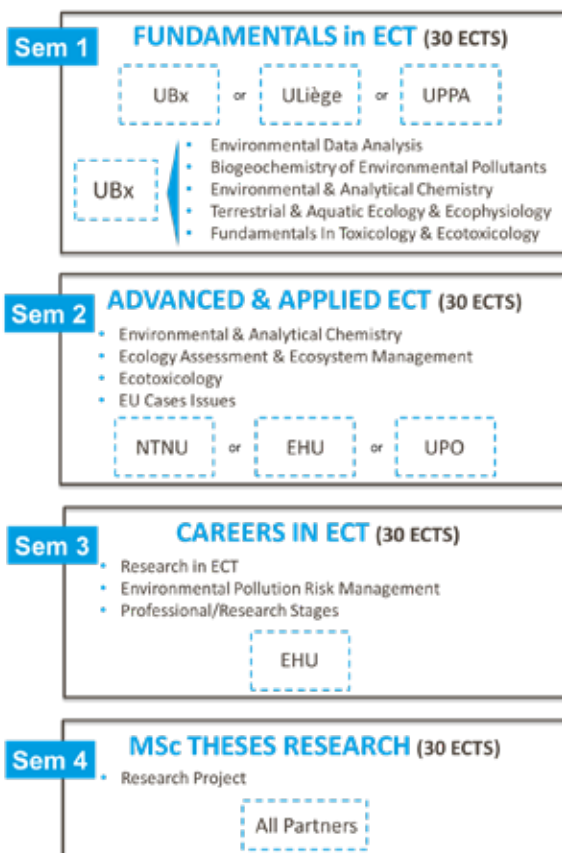
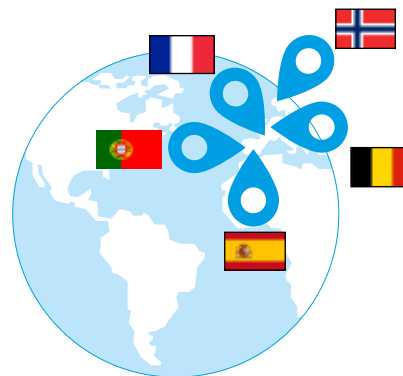
- › Erasmus Mundus scholarships
- › Erasmus+ mobility grants
- › Please note: it is not possible to benefit from more than one source of European funding

Students choosing to study in Bordeaux:

- › Mobility grants available according to excellence criteria funded by the Initiative of Excellence in Bordeaux and Bilbao (i.e. Euskampus, IDEX-International Master)
- › Mobility grants through the Aquimob platform e.g. mobility grants available according to excellence / social criteria funded by the partner institutions and by regional governments

Program structure

Student mobility is **compulsory**. Each student must enroll at three of the six partner universities.



Strengths



Students follow a joint program, combining different disciplines that can be studied at each of the 6 partner universities. They may further tailor their study program by choosing between alternative mobility pathways that provide 6 career profiles:

- › Aquatic contamination and toxicology;
- › Soil contamination and toxicology;
- › Arctic contamination and toxicology;
- › Water quality and wastewater contamination;
- › Environmental analytical chemistry;
- › Environmental risk assessment.

→ And after?

- › Graduates will be prepared for leadership roles concerning the environment and within various sectors such as research, environmental protection and management, chemical industries, non-governmental organizations and all levels of governing bodies from local to global.
- › Career profiles include managers, planners, policy makers, researchers or advisors who can make a difference in environmental management and the chemical industry.

How to apply?

Online application:

- › www.ectplus.eu

Deadlines:

- › For Erasmus Mundus scholarships: November–March
- › For self-funded students: April–May

Contact

ECT+ program and application procedure:

Master Secretariat at the coordinating University

- › ect@ectplus.eu

Bordeaux track:

Dr. Agnès Feurtet-Mazel

agnes.feurtet-mazel@u-bordeaux.fr

Dr. Nathalie Geneste

nathalie.geneste@u-bordeaux.fr

www.ectplus.eu



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TOMORROW'S SUCCESS
STARTS **TODAY**

PhD

Light Sciences & Technologies

Program factsheet

ACADEMIC COOPERATION

The PhD in Light Sciences and Technologies is managed by the University of Bordeaux and the Institut d'Optique Graduate School (IOGS) with a focus on innovation and entrepreneurship.

Strong partnerships for international mobility and / or PhD co-supervision with:

- › Brazil: São Paulo State University (UNESP)
- › Canada: Université Laval & Institut National de la Recherche Scientifique (INRS)
- › Germany: Abbe School of Photonics, (FSU Jena)
- › South Korea: Yonsei University
- › USA: University of Central Florida (UCF)

Program outline

The international PhD in Light Sciences and Technologies is part of the University of Bordeaux Graduate Research School.

Selected within the French "Investments for the Future" program as an "Initiative of Excellence", the three year program focuses on knowledge and innovation in light sciences and technologies, providing a multidisciplinary environment for first-class PhD research.

Students are offered complementary training with a strong emphasis on research and entrepreneurship skills.

THREE PHD OPTIONS

- › Physical and engineering sciences
- › Chemical sciences
- › Life and health sciences

The PhD degree program includes complementary training as part of the cursus which leads to the validation of an additional doctoral certificate.

LANGUAGE REQUIREMENTS

Program taught entirely in English, a B2 level (minimum) is required.

ADMISSION REQUIREMENTS

Candidates must fulfill the following:

Hold a Master degree (or equivalent) in Science.

FEES AND SCHOLARSHIPS

- › PhD positions are offered on a yearly basis
- › International mobility grants and co-supervised theses are available upon application based on the program's academic collaborations
- › Annual registration fees for all selected applicants are calculated according to the rules and regulations of the University of Bordeaux

Strengths

- › Top-class research environment with a high-level of technical know-how.
- › Integrated, complementary training program (for both the research and business track), provided by academic and industrial players.
- › Cross-fertilizing environment, thanks to the strong involvement of 15 research laboratories as well as industrial R&D centers and transfer platforms. This environment prepares students for future academic and / or industrial careers in photonics.
- › Opportunities to apply for international mobility scholarships.
- › Dual PhD degree opportunities with our main international partners.
- › Individual support for all international doctoral students provided by a dedicated LIGHT S&T International Officer.

Graduate Research School

Light Sciences
and Technologies
Graduate Program

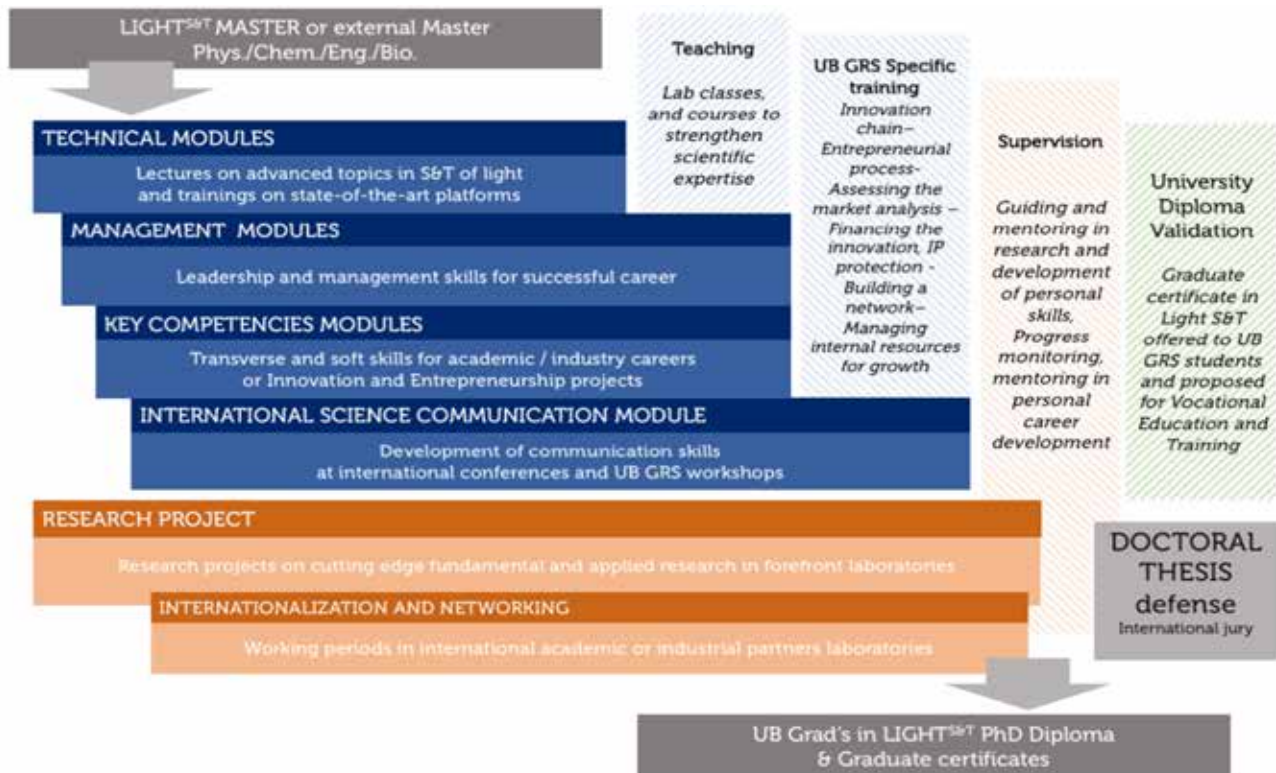
université
de BORDEAUX

→ Academic research domains:

- › Extreme regimes of light
- › Light generation manipulation and detection
- › Light imaging and biophotonics

After graduation from the Light Sciences and Technologies Master program or an external Master degree in Science (Physics, Chemistry, Engineering, Biology), students are ready to embark on the PhD program.

Program structure



After graduation, students are fully prepared for a career in research. They may also work as entrepreneurs, R&D engineers or in top-level management positions within the industrial sector.

Associated sectors:

- › Light sources
- › Laser processing and 3D manufacturing
- › Sensors and multi-responsive detection systems
- › Smart and reconfigurable integrated photonics systems
- › Innovative hybrid nanotechnologies
- › Optical component and device manufacturing
- › Innovative optical materials
- › Microscopies
- › Pharmaceutical companies
- › Bio-imaging and biotechnologies

Contacts

- › Email: education.light-st@u-bordeaux.fr
- › Email: manager.light-st@u-bordeaux.fr
- › Website: <https://light-st.u-bordeaux.fr>

How to apply?

- › Applications may be completed online: <https://light-st.u-bordeaux.fr>



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TOMORROW'S SUCCESS
STARTS **TODAY**

PhD

Algebra, Geometry and Number Theory (ALGANT)

université
de **BORDEAUX**

Graduate Research School

University of Bordeaux,
France



Program factsheet



ACADEMIC COOPERATION

Part of the **ALGANT network**
(consortium of 10 universities):

- › **Canada:** Concordia University (Montreal)
- › **France:** Université Paris-Sud (Orsay), University of Bordeaux
- › **Germany:** Duisburg-Essen University, Regensburg University
- › **India:** The Chennai Mathematical Institute
- › **Italy:** Milano University, Padova University
- › **Netherlands:** Leiden University
- › **South Africa:** Stellenbosch University

ADMISSION REQUIREMENTS

Candidates must have:

- › An academic Master degree (minimum 5 years) in a mathematics program.

LEVEL

Double/multiple Doctoral degree in Mathematics.

PROGRAM DURATION

3 years (180 ECTS).

LANGUAGE REQUIREMENTS

The teaching language is 100% English.

- › Thorough proficiency in English is required and must be proven.

TUITION FEES

Fees are calculated according to the national/university rules.

Program structure

The ALGANT-DOC doctoral program, set up by the ALGANT consortium, is a collaborative scheme creating ideal conditions for the production of high level research in pure mathematics. It leads to a double and/or joint doctoral degree, prepared under joint supervision at a minimum of two partner institutions.

Strengths



› ALGANT consortium supervisors are very active within the field of research. Doctoral candidates thus profit from their many connections with research centers throughout the world.



› Candidates are awarded a double or joint nationally recognized doctorate degree.

→ And after?

With ALGANT-DOC, the doctoral candidates will acquire the expertise and skills needed to pursue a career at the highest academic level.

How to apply?

Online application through the **ALGANT consortium website**.

Places are announced during the Fall period every year.

› www.algant.eu

Contact

Program coordinators

Prof. **Boas Erez** and Prof. **Vincent Koziarz**
doctoratealgant@math.u-bordeaux1.fr

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TOMORROW'S SUCCESS
STARTS **TODAY**

PhD

Functional Materials for Energy, Information Technology & Health

(IDS FunMat)

Program factsheet

ACADEMIC COOPERATION

Consortium of 9 universities:

- › **Belgium:** Université Catholique Louvain, Université de Liège.
- › **Canada:** University of Waterloo.
- › **France:** Institut Polytechnique de Grenoble, Université de Cote d'Azur, Université Pierre et Marie Curie Paris, University of Bordeaux.
- › **Germany:** Technische Universität Darmstadt.
- › **Portugal:** Instituto Superior Tecnico Lisbon.

European Multifunctional Materials Institute (EMMI)
www.emmi-materials.eu

LEVEL

Double doctoral degree in Functional Materials.

PROGRAM DURATION

3 or 4 years (180 or 240 ECTS).

ADMISSION REQUIREMENTS

Candidates must have:

- › A Master in material science or physical chemistry / chemistry / engineering with a speciality in the field of materials.

LANGUAGE REQUIREMENTS

The teaching language is 100% English.

- › English: certifiable equivalent of TOEFL score of 550/213/79-80 or IELTS score of 6.0

TUITION FEES

Erasmus Mundus scholarship holders

- › The fellow receives a living allowance (salary) on a monthly basis according to the conditions laid down in the employment contract (2,800€/month gross salary).
- › He/she is hired by the home institute (where the research project is mainly conducted).

- › Depending on their nationality, PhD candidates may obtain a travel allowance:
 - › Non-European students, not eligible for the 12-month rule: 7,500€
 - › European students in the case the research project includes mobility in a third country: 3,000€
- › No fee is required from the doctoral candidate with an Erasmus Mundus fellowship.
- › The departments in which the doctoral candidate performs his/her research also cover expenditures related to the candidate's research activity.

Non-scholarship holders

- › The amount of the gross salary will depend on the funding (scholarships from the partner institutions and from local authorities).

Program outline

The IDS FunMat program is an international, high-quality doctorate in Functional Materials covering the domains of energy, information, technology and health.

This program is built upon the expertise of nine universities, leaders in the field, and 17 associated partners (companies, research governments and organizations, and training consultancies).

The consortium provide a large scope of research projects (34 laboratories involved), and includes international mobility and the participation of industry players.

Program structure

Each PhD is carried out in co-supervision between universities from two different countries. For most projects, an industry partner is also involved. The PhD candidates must spend at least six months in each university.

The common elements of all projects are:

- › International and intersectoral mobility: each project is co-supervised by two universities from different countries (see "Academic cooperation"), and the candidate must spend at least six months in each university.
- › Involvement of projects with industry. Most projects also have an industry partner, and interaction and collaboration with industry is a requirement.
- › Duration of the PhD projects should be three years, the maximum duration is four years.

- › Participation of candidates in an annual joint training school. This school lasts five to six days, and covers both scientific training and "transferable skills" such as Project Management, Intellectual Property Rights, Presentation Techniques etc.
- › Preparation of an annual laboratory seminar and short written report.
- › Submission of one or more scientific publications in refereed journals.
- › Participation in an international scientific conference with an oral or poster presentation by the candidate.

The PhD degree is finally obtained with the submission of a thesis, and an oral presentation before a committee, both delivered in the English language.

Strengths



- › International high-quality doctorate program.



- › International mobility.



- › Participation of key industrial players.

→ And after?

After completion of this PhD, graduates may start working as scientists in universities, research centers and R&D units within companies.

How to apply?

Online application:
www.idsfunmat.u-bordeaux1.fr

Contact

PROGRAM COORDINATOR:

Laurent Servant

laurent.servant@u-bordeaux.fr

Audrey Sidobre

audrey.sidobre@u-bordeaux.fr

University of Bordeaux,
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TOMORROW'S SUCCESS
STARTS **TODAY**

PhD

Bordeaux Neurocampus

Program factsheet

LEVEL

- › PhD in Neuroscience

LANGUAGE REQUIREMENTS

- › Have an adequate level of English to follow and participate in courses, projects, seminars, workshops, etc.

ADMISSION REQUIREMENTS

- › Hold a Master degree in a relevant discipline
- › Prove an excellent academic and scientific level
- › Demonstrate previous experience in a research laboratory

FEES AND FUNDING

- › 6 fellowships are offered by the program
- › Mobility grants are available upon application
- › Annual university registration fees: approximately 400€

PROGRAM DURATION

- › 3 years (full time)

Program outline

The **PhD Program in Neuroscience** is part of the Bordeaux Neurocampus Graduate Program, supported by the University of Bordeaux Graduate Research School.

The PhD Program takes place within the research laboratories of the dynamic neuroscience community of Bordeaux Neurocampus.

The program addresses a wide range of topics concerning complex brain functions and diseases.

Our teams and partners have diverse as well as complementary expertise, that includes: imaging and biology of neural cells and synapses, animal and human behavior, physiology of neural networks, mechanisms of neurodegenerative and mental disorders.

Multidisciplinary technological approaches and multiscale analyses are employed, at the molecular, cellular, systemic, behavioral, and clinical levels.

Program structure

Selected as a French Initiative of Excellence, the PhD Program in Neuroscience focuses on knowledge, innovation and cross-disciplinarity.

PhD students benefit from a variety of **educational programs, ambitious training initiatives**, international **conferences** and top quality research **facilities**.

The International PhD training offer includes:

- › **Research projects** in Bordeaux Neurocampus laboratories
- › **100 hours of additional courses**, with a balance between disciplinary (Neuroscience) and complementary training.
- › **Monthly PhD seminar series** currently organized by PhD students.
- › **Hands-on training workshops** as a trainee or instructor at the Bordeaux School of Neuroscience.

All courses are delivered in English.

Strengths

An integrated, innovative and cross-disciplinary international PhD Program in neuroscience, taking place within a vibrant scientific community :



Expertise of the Bordeaux Neurocampus research laboratories covering a wide variety of skills and technologies from basic to applied and translational research.



› International mobility and/or training opportunities.



› Cutting-edge facilities that feature technological innovations and provide graduates with hands-on training.



› Access to international scientific networks via structured academic and industrial partnerships



› Career guidance services to support the professional insertion of graduates

→ And after?

- › The PhD Program in Neuroscience prepares students for different career opportunities (research, teaching, project management, scientific mediation, etc.) in the academic as well as the private sector.

How to apply?

Information: <http://www.bordeaux-neurocampus.fr>

Online application: <https://aap.u-bordeaux.fr/siaap/pub/appeil/list>

- › Online application deadline: July 31st, 2018
- › Starting date: Fall 2018

Admission to the PhD program involves 4 steps:

- › **Online application:** personal details and documents to be provided for pre-selection
- › **Personal interview** (in person on site at Bordeaux Neurocampus or via Skype): 30 minutes to present academic background, research experience, motivation and arguments justifying the choice of three preferred PhD research projects
- › **Discussion and final validation with the PhD supervisor**
- › **Pedagogical and administrative registration.**

PhD students of the program are enrolled in the Life and Health Science Doctoral School of the University of Bordeaux.

CONTACT

neurocampus.graduateprogram@u-bordeaux.fr
www.bordeaux-neurocampus.fr

www.u-bordeaux.com

@univbordeaux univbordeaux universitedebordeaux



TOMORROW'S SUCCESS
STARTS **TODAY**

MASTER

Pharmacovigilance and Pharmacoepidemiology (Eu2P)

Program factsheet

COOPERATION

Collaboration with European universities and experts from regulatory bodies and the pharmaceutical industry.

ACADEMIC PARTNERS

- › France: University of Bordeaux (academic coordinator)
- › Italy: Università della Campania Luigi Vanvitelli, Napoli
- › The Netherlands: Erasmus Universitair Medisch Centrum Rotterdam / Universiteit Utrecht
- › Spain: Universitat Autònoma de Barcelona
- › U.K.: University of Hertfordshire

INDUSTRIAL PARTNERS

- › Belgium: Amgen / Janssen Pharmaceutica / UCB Pharma
- › Denmark: Novo Nordisk / Lundbeck
- › Finland: Orion Corporation
- › France: Iqvia / Sanofi
- › Germany: Bayer Pharma / Boehringer Ingelheim International

- › Spain: Almirall
- › Sweden: AstraZeneca
- › Switzerland: Hoffmann-La Roche AG / Novartis Pharma
- › U.K.: Eli Lilly / GlaxoSmithKline Research and Development / Shire

REGULATORY PARTNERS

- › European Medicines Agency
- › Agence Nationale de Sécurité du Médicament et des Produits de Santé

LEVEL

Joint Master of Science degree. European qualification supported and recognized by the Eu2P regulatory and industrial partners.

PROGRAM DURATION

- › 2 years (120 ECTS).
- › Direct access to second year for postgraduate with epidemiology, pharmacology and statistics knowledge.

ADMISSION REQUIREMENTS

Year 1 requirements:

- › Bachelor degree in Health or Life Sciences.

Year 2 requirements:

- › Postgraduate degree in Health or Life Sciences along with additional knowledge and experience in statistics, epidemiology and pharmacology.

LANGUAGE REQUIREMENTS

Non-native English speakers must provide a certificate proving a minimum of English B2 level according to the "Common European Framework of Reference for Languages" grid (European Union and Council of Europe, <http://europass.cedefop.europa.eu>).

TUITION FEES

The tuition fees only change according to full-time professional or student status but do not vary according to location.

- › Professionals: 12,000€/year
- › Students: 7,000€/year

No additional costs and no mobility required.

Program outline

The aim of the Eu2P Master in Pharmacovigilance and Pharmacoepidemiology is to respond to the growing need for well-trained professionals in pharmacovigilance and pharmacoepidemiology highlighted by industry, regulatory and academic bodies.

There is a particular need for skilled people, trained in medicine risk-benefit assessment, risk management plan elaboration, risk minimization and risk communication. Eu2P-trained professionals are qualified for new job profiles such as project managers, pharmacoepidemiological coordinators, risk-benefit analysts and people able to interact with statisticians and clinicians.

Eu2P is designed for:

- › Non-specialists.
- › Graduate and postgraduate students in Health and Life Sciences.
- › Healthcare professionals.
- › Companies, regulatory agencies and academic institutions.

Program structure

The Eu2P Master offers six high level curricula track specializations to meet specific professional needs in:

- › Benefit assessment of medicines
- › Medicines risk identification and quantification
- › Medicines benefit-risk assessment
- › Medicines and public health
- › Medicines risk communication
- › "A la carte" track

Year 1 60 ECTS

- › Validation of mandatory basis modules for Pharmacovigilance and Pharmacoepidemiology (24 ECTS).
- › Completion of a tutored project (6 ECTS).
- › Validation of a research project (30 ECTS).

Year 2 60 ECTS

- › Validation of theoretical content (ten modules, 30 ECTS):
 - › Six mandatory theoretical modules.
 - › + Modules of the chosen track.
 - › + Choice of one or two complementary optional modules.
- › Validation of a research project (30 ECTS).

Each Master student must conduct a research project in parallel to the theoretical training during the academic year. This research project may be carried out within an academic, regulatory or private body. If the student is already employed, he/she may complete the research project for the employer.

Strengths



100% online, open to all professionals or students throughout the world. The Master may be completed at work or at home, you do not need to travel as even the examinations are online. 70% of our students are professionals and manage their Eu2P diploma while they work full or part-time, it's up to you!



Research projects may be performed in public or private environments.



The Eu2P European Master is built and recognized by all 24 academic, regulatory and industrial Eu2P partners. The courses are based on today's job market and practices.



Increasing worldwide recognition for the Eu2P program as an excellent employment opportunity and also a way of improving regulatory sciences.

→ And after?

- › Opportunities that involve collecting, monitoring, researching, assessing and evaluating information from healthcare providers and patients on the adverse effects of medications to ensure that drugs on the market are safe for patients and to identify new hazards associated with the medication.
- › Students are generally in either full or part-time employment and are likely to have a range of responsibilities, mostly in pharmacovigilance and medical information, monitoring safety data in either pre- or post-marketing studies or from spontaneous reports. Pharmacovigilance is an expanding area, primarily due to an increase in regulation and product withdraws based on safety concerns.
- › Following registration to Eu2P, students are invited to join the Alumni group via which they regularly receive job offers from all over the world.

How to apply?

Applicants must complete the on-line application procedure on the Eu2P program website:

› www.eu2p.org

Master applications may be submitted from February to June. Selection is made during the first two **weeks of July**.

Contact

PROGRAM MANAGER:
Dr. Karine Palin
eu2p.office@eu2p.org
www.eu2p.org

Eu2P

imi Innovative medicines initiative

efpia

www.u-bordeaux.com

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TOMORROW'S SUCCESS
STARTS **TODAY**

MASTER

Analytical Chemistry for Drugs and Natural Products

Program factsheet

ACADEMIC COOPERATION

Consortium of two partner universities:

- › France: University of Bordeaux
- › Morocco: Mohammed V University - Rabat

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirement:

- › Hold a first level Master in pharmacy or 4 years study in chemistry, biochemistry or engineering.

LEVEL

Master degree: 2nd year.

PROGRAM DURATION

1 year (60 ECTS).

LANGUAGE REQUIREMENTS

- › English: certifiable equivalent of TOEFL score of 550/213/79-80 or IELTS score of 6.0

TUITION FEES

- › 6,000€ for EEA students and 8,600€ for non-EEA students. Fees include accommodation and flights for the international mobility period in Morocco.
- › Scholarships: Erasmus Mundus Act. 2, partnerships (students), University of Bordeaux Initiative of Excellence, Aquimob.

Program outline

This second year Master degree allows students to deepen their theoretical and practical knowledge in the field of analytical control of drugs and health products that are based on plants. It focuses on the quality control of such health products compared to international standards.

The Master degree also aims to increase the safety of therapeutic products that are based on plants and which are therefore not concerned by the pharmaceutical circuit controls.

The program thus develops a strong interdisciplinary dimension through the involvement of pharmaceutical sciences, technical sciences and the legal domain.

Program structure

Semester 1

Education units in Bordeaux

- › Validation (1 ECTS)
- › Access to Euro- Mediterranean market of drugs and other health products (3 ECTS)
- › Microbiology control and quality (2 ECTS)
- › Drug design & pharmaceutical technology for drugs and natural products (3 ECTS)
- › Quality control applied to drugs (3 ECTS)
- › Research and analytical development (3 ECTS)
- › English & communication skills (3 ECTS)
- › Quality by Design & Chemometry (3 ECTS)



University of Bordeaux,
France

Mohammed V
University - Rabat,
Morocco

Education units in Rabat-Morocco

- › Project management: drug control and natural products (9 ECTS)

Semester 2

Training period of six months in France or abroad (30 ECTS)

Strengths



Permits students from pharmacy and other specialties to acquire strong skills in analytical chemistry for drugs and natural products.



Includes "hands-on" qualification training for key techniques using the latest equipment from the university laboratories for chemical and structural analysis.



Develops global knowledge about analytical and regulatory problems related to counterfeit drugs and health products.

→ And after?

- › Graduates from the School of Pharmacy of the University of Bordeaux have an excellent employment record.
- › Graduates may access leading positions within pharmaceutical organizations; the cosmetics and food industry in France and around the world.

How to apply?

Students may apply online:

- › <https://apoflux.u-bordeaux.fr/etudiant/>

Contact

PROGRAM COORDINATOR:

Dr. Boutayna Rhourri-Frih

boutayna.frih@u-bordeaux.fr

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TOMORROW'S SUCCESS
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MASTER

Public Health Data Science

Program factsheet

ACADEMIC COOPERATION

The Master in Public Health Data Science is delivered by the University of Bordeaux along with the Bordeaux School of Public Health (ISPED) and the Bordeaux Population Health Research Center (BPH).

ADMISSION REQUIREMENTS

Candidates must fulfill the following:

Hold at least a Master (year 1) degree with honors (minimum 240 ECTS or equivalent in terms of knowledge) in one (or more) of the following disciplines: statistics, informatics or epidemiology.

LEVEL

Master (year 2) of Science in Public Health Data Science.

LANGUAGE REQUIREMENTS

This program is taught entirely in English. Excellent proficiency in English is therefore required.

Students whose native language is not English are strongly recommended to provide a TOEFL, TOEIC or IELTS certification:

- › TOEFL score of 550/213/80, TOEIC score of 900-990 or IELTS score of 6.0.

PROGRAM DURATION

1 year (60 ECTS), including an internship.

FEES AND SCHOLARSHIPS

- › Annual registration fees for all selected applicants are calculated according to the rules and regulations of the University of Bordeaux
- › Financial aid and housing grants may be awarded to selected applicants according to criteria of excellence

Program outline

The Master in Public Health Data Science provides a year of international research in public health data science, from project design to real life health data analysis and the communication of results.

Selected within the French "Investments for the Future" program as an "Initiative of Excellence", the program covers multidisciplinary skills in epidemiology, informatics and statistics, and ensures that students gain strong knowledge about the strengths and limits of digital technologies and their use in public health research.

Strengths

Epidemiology

- › Translation of a public health / clinical problem into a research question, including the design of research plans for surveillance systems, observational and experimental studies (i.e. clinical trials), evaluation of validity and causality of an association.

Statistics

- › Methods for supervised and unsupervised statistical analysis and modelling of biomedical data (including high-dimensional and time-to-event data), statistical learning, data mining, data integration, advanced computational statistics.

Informatics

- › Architecture of data integration (i2b2, Transmart), interoperability, knowledge representation (terminologies, ontologies), natural language processing, data visualization, programming, cloud computing and Hadoop, linked open data, security, confidentiality and integrity of data.

College of Health Sciences

Digital Public
Health
Graduate Program

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de BORDEAUX

Program structure

MASTER (YEAR 2):

Semester 3

Basics (6 ECTS)

- › Focus on basic knowledge and the functional capabilities of the tools used in health data analytics.

Electronic health data (6 ECTS)

- › Focus on the skills required to conceptualize, manage, analyze and communicate *via* health research carried out by Electronic Health Records (HER) and medico-administrative databases (MA-DBs).

Digital cohorts (6 ECTS)

- › Focus on the skills required to conceptualize, manage, analyze and communicate *via* cohort studies that integrate digital tools.

Web-based data (6 ECTS)

- › Focus on the abilities needed to prepare public health studies which integrate data from social networks and web forums, linked open data and mobile data. Practice is carried out *via* a dedicated case study that involves the processing of large mobile dataset (call details records).

Omics data (6 ECTS)

- › Focus on the abilities needed to conceptualize, manage, analyze and communicate using clinical studies that integrate high dimensional data.

→ And after?

Upon completion of this Master in Public Health Data Science, students may continue with further studies and research *via* a PhD in Digital Public Health or they may enter the working world with strong qualifications for a career in public health.

Graduates not only have a global vision of data science issues in relation to epidemiology and public health, they also master the research and leadership skills that are necessary for chief data officer jobs. They are thus well prepared to become future leaders of the digital public health domain within the public and / or private sector.

Contact

COORDINATOR: **Prof. Rodolphe Thiebaut**

- › <https://digital-public-health.u-bordeaux.fr>
- › www.facebook.com/DPHgraduateprogram/
- › <https://college-doctoral.u-bordeaux.fr/Le-college/Les-ecoles-universitaires-de-recherche/EUR-Digital-Public-Health>

Semester 4

Value creation (6 ECTS)

- › This final e-learning course prepares students so that as graduates, they are capable of becoming immediate contributors in the workplace whether it be in the academic or the industrial sector. Students learn to develop their entrepreneurial skills and also acquire an understanding of the societal and economic value created by digital public health data research.

Internship (24 ECTS)

- › Students complete their internship either with the research team that generated a project case study during the Public Health Data Science Master program or else with a team from the extensive research network of the Graduate Program.

How to apply?

Please contact: dph@u-bordeaux.fr

Documents necessary for the selection procedure:

- › Application form
- › Copies of all graduate diplomas (BSc and MSc)
- › All previous transcripts
- › Syllabus and study plan
- › CV in English (2 pages maximum)
- › Cover letter in English (2 pages maximum)
- › Recent English certificate (IELTS 6.0; TOEFL (550/213/80); TOEIC 900-990) or any document certifying a C1 level of English upon review.
- › Whenever possible (optional), one recommendation letter from an academic or professional body (2 pages maximum), including the referee's signature, presented on institutional headed paper and bearing an institutional stamp/seal.

Please note:

- › Maximum number of students: 21
- › Selection: based on documents and an interview

*This Master program is supported within the framework of the PIA 3 (Investments for the Future).
Project reference: 17-EURE-0019*



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**TOMORROW'S SUCCESS
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PhD

Digital Public Health

Program factsheet

LEVEL

PhD in Public Health – option Digital Public Health.

PROGRAM DURATION

3 years (full time contract).

FEES AND SCHOLARSHIPS

- › PhD positions are offered on a yearly basis
- › International mobility grants and co-supervised theses are available upon application based on the program's academic collaborations
- › Annual registration fees for all selected applicants are calculated according to the rules and regulations of the University of Bordeaux

ADMISSION REQUIREMENTS

This program is open to doctoral students with a **research project in Digital Public Health**, irrespective of their original field of study.

Candidates should:

- › Hold a Master of Science degree or equivalent relevant to public health (e.g. Informatics, Epidemiology, Statistics, Mathematics, Law, Sociology, Anthropology, Psychology, Communication, Economics, Marketing, etc.)
- › Prove an excellent academic and scientific level
- › Be fluent in English (both oral and written)
- › Demonstrate an interest for interdisciplinary approaches

ACADEMIC COOPERATION

The **Digital Public Health Graduate Program** is a project conceived by the Bordeaux Population Health research center (BPH) and the Bordeaux School of Public Health (ISPED) and involves numerous academic and industrial partners within the domain of digital health.

Strong partnerships for international mobility and / or PhD co-supervision with:

- › Canada: McGill University
- › The Netherlands: Maastricht University
- › Italy: University of Pisa
- › Sweden: Karolinska Institute
- › United Kingdom: University College London, Imperial College London

The Digital Public Health Graduate Program strongly encourages applications from international students with research projects in co-supervision.

Program outline

Selected within the French "Investments for the Future" program as an "Initiative of Excellence", the PhD program in Digital Public Health is strongly focused on innovation and cross-disciplinarity.

Students benefit from a variety of educational programs, ambitious training initiatives, international conferences and top-quality research facilities. Our students attend a series of classes in public health, epidemiology, informatics, and statistics and also learn the basics of health communication, economics, law, sociology and anthropology. They debate with peers from other disciplines, design plans and experiments, collect and analyze data, and communicate their thesis findings in research presentations.

Our researchers and partners offer workshops based on their diverse and complementary expertise, such as modelling in health, mobile technologies for mental health, or evaluation of complex interventions.

Graduate Research School

Digital Public Health
Graduate Program

université
de BORDEAUX

THE PhD PROGRAM IN DIGITAL PUBLIC HEALTH

Our program is training in research, through research and focuses on innovation and cross-disciplinarity.

PhD STUDENTS

Benefit from the supervision of a director, a variety of educational programs, ambitious training initiatives, international conferences and top quality research facilities.

A SERIES OF CLASSES

Covering the topics of public health, epidemiology, informatics and statistics as well as health communication, economics, law, sociology and anthropology.

WITH PEERS FROM OTHER DISCIPLINES

In order to design, collect and analyze data and communicate their thesis findings in research presentations.

WORKSHOPS

Based on diverse and complementary expertise such as modelling in health or evaluation of complex digital interventions.

Program structure

Our PhD program is training in research, through research, and students conduct their work in research teams under the supervision of a director.

Students are required to take research courses that include teaching sessions and seminars related to digital public health and their PhD project. These courses correspond to about 150 hours over the duration of the Doctorate. Students plan their training and research courses with their thesis director.

In addition to the courses, students carry out their research to meet the aims of their project and to complete their thesis.

→ And after?

Graduates not only have a global vision of data science issues in relation to epidemiology and public health, they also master the research and leadership skills that are necessary for chief data officer jobs. They are thus well prepared to become future leaders of the digital public health domain within the public and / or private sector.

How to apply?

› Applications may be completed online: <https://aap.u-bordeaux.fr>

Contacts

- › Email: dph@u-bordeaux.fr
- › Website: <https://digital.public.health.u-bordeaux.fr>
- › Facebook: <https://www.facebook.com/DPHgraduateprogram/>



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TOMORROW'S SUCCESS
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MASTER Wine Tourism Innovation (WINTOUR)



Program factsheet

ACADEMIC COOPERATION

Joint Erasmus Mundus Master between:

- › Rovira i Virgili University (URV), Tarragona, Spain
- › University of Porto (UP), Portugal
- › University of Bordeaux (UBx), France

LEVEL

Triple Master degree.

PROGRAM DURATION

2 years (120 ECTS).

LANGUAGE REQUIREMENTS

English: certifiable equivalent of TOEFL score of 550/213/79-80 or IELTS score of 6.0

TUITION FEES

- › Fees for program* countries students: 4,500€/year
- › Fees for partner* countries students: 9,000€/year

NB: students may follow the WINTOUR program as self-funded students or may apply for one of the Erasmus+ scholarships (EMJMD action) available. These scholarships are designed to cover most student expenses throughout the WINTOUR course.

ADMISSION REQUIREMENTS

Candidates must fulfill the following requirements:

- › Have completed a university Bachelor or Master degree (minimum 180 ECTS) in the fields of Tourism, Economics, Management, Marketing, Languages, Natural and Experimental Sciences (e.g. Oenology, Biotechnology, Food Technology, Agriculture), or closely related subjects.

- › Personal motivation, prior work experience in the field, as well as linguistic skills in languages other than English (especially Spanish, French or Portuguese, the languages of the organizing institutions) are important elements in the selection process.

LANGUAGE REQUIREMENTS

Candidates must present a recent English language certificate, with at least a B2 level according to the Common European Framework of Reference for Languages (official test certifications from Cambridge ESOL, IELTS or TOEFL are accepted).

**Program/partner countries: please consult our website for the list of these countries.*

Program outline

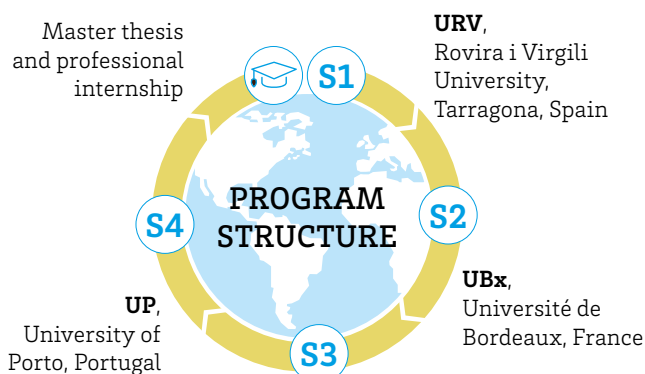
The Erasmus Mundus Master in Wine Tourism Innovation (WINTOUR) offers a truly integrated study program that takes advantage of the tourism and oenology expertise of three universities and regions of Europe.

These universities are located in highly attractive touristic areas, recognized with the label of UNESCO Human Heritage, and have a long tradition in wine, producing specialty wines such as sparkling, fortified, aged red and sweet.

The objectives of the WINTOUR program are to:

- › Prepare broadly trained, highly adaptable, qualified professionals for the tourism and wine industries. These graduates may then promote innovative wine tourism developments to generate added value through increased income and recognition of this sector.
- › Provide students with multidisciplinary and multi-sectorial knowledge and training that increases their understanding of wine-making and tourism management.
- › Promote high-quality, practical training in entrepreneurship and company management via the organization of internships within the non-academic sector.

- › Ensure the effective integration and networking activities of students within the socio-cultural and professional environment during their period of training.



Program structure

	Optional	Wine tourism & marketing	Wine-making	Wine heritage	Internships
S1 URV	<ul style="list-style-type: none"> › Adaptation to oenology (6 ECTS) › Adaptation to geography & economy (6 ECTS) › Adaptation to economics (3 ECTS) 	<ul style="list-style-type: none"> › Leisure and wine tourism (6 ECTS) › Marketing of tourism & wine (6 ECTS) 	<ul style="list-style-type: none"> › Sparkling wine production (6 ECTS) 	<ul style="list-style-type: none"> › Spanish wine regions (3 ECTS) › Spanish wine heritage & culture (3 ECTS) 	<ul style="list-style-type: none"> › Adaptation to practical wine-making (3 ECTS)
S2 UBx		<ul style="list-style-type: none"> › Management of wine tourism firms and entrepreneurship (3 ECTS) › ICT & wine tourism - Oenotourism 2.0 (6 ECTS) 	<ul style="list-style-type: none"> › Aged & sweet wine production (6 ECTS) 	<ul style="list-style-type: none"> › Wine appellations knowledge, food matching and service, tasting (6 ECTS) › French wine heritage & traditions (3 ECTS) 	<ul style="list-style-type: none"> › Wine tourism internship (6 ECTS)
S3 UP		<ul style="list-style-type: none"> › Wine tourism behavior (3 ECTS) › Wine tourism communication and new marketing tools (6 ECTS) › Wine tourism events management (3 ECTS) 	<ul style="list-style-type: none"> › Fortified wine production (6 ECTS) 	<ul style="list-style-type: none"> › Portuguese wine regions › Portuguese wine heritage and tourism (3 ECTS) 	<ul style="list-style-type: none"> › Practical wine-making
S4	Master thesis and professional internship (30 ECTS)				

How to apply?

Selection is based on the following criteria:

- › CV and academic track record (50%)
- › Cover letter and professional project: an individual interview may be organized (30%)
- › Professional experience in the field and previous international mobility (10%)
- › Other languages especially Spanish, French or Portuguese (10%)

1st call: applicants Erasmus Mundus (EMJMD) scholarships

› 14th November 2019 - 6th February 2020

2nd call: self-funded applicants

› 12th March 2020 - 29th April 2020

Consult the website: www.wintour-master.eu/en/apply/

Strengths

Managing complex information on different topics in a foreign language.

Defining diagnostics/assessments via the efficient management and use of information.

Solving problems within multidisciplinary contexts in a creative and innovative way.

Collaborating with multidisciplinary teams within different contexts.

Communicating complex ideas clearly to all target publics.

Applying ethical principles and social responsibilities as a citizen and as a professional.

Developing the necessary autonomy to work on research projects within scientific/technological partnerships.

→ And after?

The WINTOUR program trains professionals in the field of oenology and tourism, who may apply for positions in the following areas:

- › **Private sector:** creation of start-ups and business initiatives with a focus on wine as a tourist attraction and tourism as a means for promoting wine and wine regions; development of international marketing strategies, wine tourism activities of companies within the wine industry; specialized consultancy in the design and development of new strategies for increasing the competitiveness of the wine sector.
- › **Public administration:** positions in public organizations responsible for the planning, management and promotion of wine tourism products at a local, national and international level.
- › **Research and teaching:** participation and leadership of multidisciplinary research teams in the fields of oenology and tourism, in public or private research organizations.

Contacts

PROGRAM COORDINATORS:

- › **Gemma Beltran (URV):** gemma.beltran@urv.cat
- › **Pierre-Louis Teissedre (UBx):** pierre-louis.teissedre@u-bordeaux.fr
- › **Laurence Geny (UBx):** laurence.geny-denis@u-bordeaux.fr

SECRETARY: master.wintour@urv.cat

www.wintour-master.eu/en_index/



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Our Welcome Contacts

To find out more information about the study program that interests you, please phone or email the contact indicated on the flyer.

For any questions concerning our exchange programs and studying in Bordeaux, please contact our International Mobility Officers (International Office). Finally, our Student Life Centers also provide information about student life in Bordeaux.

› **Science and Technology / Biology**

› **Vine and Wine Sciences**

International Office:

incoming-talence@u-bordeaux.fr / +33 5 40 00 83 33

Student Life Center:

bve.talence@u-bordeaux.fr / +33 5 40 00 84 84

› **Health / Human Sciences**

› **Sports and Physical Education**

International Office :

incoming-carreire@u-bordeaux.fr / +33 5 57 57 46 77

Student Life Center:

secbve.bordeaux@u-bordeaux.fr / +33 5 57 57 17 79

› **Law, Political Science, Economics, Management**

› **School of Education**

International Office :

incoming-pessac@u-bordeaux.fr / +33 5 56 84 29 84

Student Life Center:

bve.pessac@u-bordeaux.fr / +33 5 56 84 62 60

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